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ABSTRACT

The effectiveness of the state of Maryland's Community Home Care Services (CHCS) program was evaluated in this study. The CHCS's major goal is to enable persons 65 and over and their spouses (regardless of age) to remain in their own homes or in other independent living arrangements, consistent with their desires, ability and safety; or to assist them to attain appropriate alternate living arrangements as needed. Since available resources did not permit a rigorous experimental design, data was gathered primarily from a survey of case records conducted by CHCS workers. Thus the perceptions of the workers constituted a major input to the evaluation process. Data were gathered regarding socio-demographic factors, client risk factors, and patterns of service provision. In general, the program was found to be offering clients appropriate services which respond to their needs and ameliorate their problems to some degree. Recommendations are offered for each major finding. (Author/BP)

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REPORT ON THE EVALUATION OF THE STATE OF MARYLAND'S COMMUNITY HOME CARE SERVICES PROGRAM

co-sponsored by

The Maryland Office on Aging

and

The Department of Human Resources

Robert A. Serio
Principal Researcher

GG013536

ACKNOWLEDGEMENTS

In a study such as this, requiring much interdepartmental communication and coordination, a successful outcome depends in large measure on a spirit of willing cooperation among those who are most closely associated with the project. Throughout this study I found all the persons with whom I worked always eager to give assistance and to share their time and expertise. My thanks go especially to Mrs. Lois Scherer, SSA Program Specialist in charge of CHCS, and Mrs. Donna Folkemer, OoA Planner and the study's project supervisor. Mrs. Scherer was always positive and supportive, indeed helpful in every way. Mrs. Folkemer offered direction at key points and ran interference for me beautifully. Both of them caused me to sharpen my ideas, clarify major issues and subject the entire process to the kind of reality testing that only people closely associated with program operation and knowledgeable about the State bureaucracy can provide.

R.A.S.

COMMUNITY HOME CARE SERVICES

RECOMMENDATIONS BASED ON THE COMMUNITY HOME CARE SERVICES REPORT

1. Finding:

The data showed that although appropriate types of services are being provided by local departments of social services, 57.5% of all individuals sampled received fewer services or lesser amounts of services than workers indicated were needed.

Recommendation:

A greater commitment to serving elderly persons is needed in the State with increased allocations of funds to meet needs, utilizing all possible agency resources in each community, including local non-profit private agencies and Area Agencies on Aging.

2. Finding:

Forty-eight percent (48%) of the clients sampled were identified as lacking sufficient social contacts.

Recommendation:

It is recommended that linkages among local Departments of Social Services, local Offices or Commissions on Aging, local health departments, and other local agencies be strengthened to insure adequate program knowledge and appropriate referral. Services aimed at alleviating isolation should be developed where they do not exist.

3. Finding:

Fifty-five percent (55%) of all clients sampled had been institutionalized, generally for a short time, prior to receiving service. CHCS may have prevented long term institutionalization for those clients. Very few persons had been assisted to return to community-based living from long-term institutions such as State hospitals and nursing homes.

Recommendation:

In order to expand services to assist persons toward de-institutionalization, additional staff would have to be allocated to local departments of social services or through contractual arrangements to work with the institutional staff in state hospitals, domiciliary homes, and nursing homes before persons are discharged so that an adequate planned continuum of care to such persons is available before and after their return to the community.

4. Finding:

The study revealed that less than 1% of the sample were fee-paying clients.

Recommendation:

Further study of this finding is needed to determine if, lacking sufficient staff to serve all who need service, low-income persons are being given priority; or whether those persons with less critical needs or who have ability to hire other assistance, are being put on waiting lists; or whether few persons with higher incomes seek help from local departments of social services; or whether there is discomfort with the concept of collecting fees.

5. Finding:

Workers believed the program probably or definitely was preventing institutionalization in 78.4% of the cases. The data showed that workers did not believe the Community Home Care Services provided would prevent institutionalization for 21.6% of the sampled clients.

Recommendation:

Further study is needed to understand the meaning of this finding. The finding may have occurred because the criteria workers were required to use in the study focused on immediate risk of institutionalization. DHR/SSA, by law, requires that services be provided to persons requiring short term protection and care (including those diagnosed as needing nursing home care) and to persons for whom services would meet long range preventive goals.

Additionally, some clients may have been at such high risk that services could not be provided at a sufficient intensity to prevent institutionalization.

6. Finding:

The fiscal accounting system did not clearly indicate the expenditures for Adult Service workers who served the elderly.

Recommendation:

It is recommended that 75 positions be transferred from Adult Services to the Community Home Care Services program. Such a transfer will permit appropriate accountability for all expenditures for the CHCS program in the future.

7. Finding:

The cost per hour of Community Home Care Services was calculated to be $12.38 during fiscal year 1976 based on total program budgets for all social workers, aides, supervisors and clercial assistance, including all local and state direct and indirect costs. Currently, by law, CHCS Aides are state classified personnel whose salaries are considerably higher than the minimum wage.

Recommendations:

A. It is recommended that a new method of ascertaining the actual cost of each of the components of the service be devised, separating the cost of aide services from the cost of social workers' services, and that separate fee scales be developed reflecting the different levels of service.

B. It is recommended that through a contracting device, local departments be given the option of retaining individual providers of chore services, defined as heavy and light housekeeping, home repairs, yard work, and errands as a supplement to existing services.

C. It is recommended that purchase of service contracts with private non-profit agencies be encouraged in order to meet community needs in each jurisdiction. This procedure could include contracts with local governments to provide for the expansion of local DSS services without an increase in administrative costs.

8. Finding:

By necessity, a tool measuring to what extent clients were at risk of institutionalization was devised for the study. It is not known whether all workers interpreted this tool in the same way.

Recommendation:

Some method of calculating risk factors should be developed for workers to use as part of the intake process. The instrument developed should serve as a screening tool enabling administrators and social workers in the program to set priorities and evaluate which persons are most in need of services.

9. Finding:

A problem experienced by 62.0% of the clients sampled was that of lack of transportation services. Sixty-two percent (62.0%) of the sample received this service, showing a direct positive correlation between service need and service provision.

Recommendations:

A. Lack of transportation services for the elderly should continue to be recognized as a community problem in each jurisdiction of the State, particularly in rural areas which lack public transportation.

A large percentage of CHCS resources are used for transportation services. The feasibility of meeting this need in other ways should be explored.

B. Specific transportation needs should be determined and appropriate ways to meet them should be developed, utilizing State agencies, Area Agencies on Aging, and/or local private or public organizations.

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August 24, 1977

Matthew Tayback, S.C.D.
State Director on Aging
Office on Aging
301 West Preston Street
Baltimore, Maryland 21201

Dear Dr. Tayback:

We have reviewed with interest the revised version of the Community Home Care Services Evaluation Report. We believe that there are no remaining substantive areas of disagreement about the content and that the study is ready for release.

We are pleased at this initial cooperative effort for program evaluation as called for in Section 88A and Section 86 of Maryland Code.

The study is of worth to us in that it validates the appropriateness and benefit of our services and documents the need for expansion of our Community Home Care Program. As you know, we have made some of the changes recommended in the report. Specifically, positions have been transferred from Adult Services Project to the Community Home Care Project and we have refined our method of ascertaining actual cost of social worker services and aide services. We have developed separate fee scales for each of these components.

We would encourage joint effort to develop a uniform assessment to provide documentation of the level of risk for clients, indicate priority and level of service intervention and guide in developing most appropriate methods of service delivery. The data generated by such an instrument would be useful in making program and budgeting decisions for serving the aged population.

We would like to request (35) copies of the report for distribution in DHR/SSA and to our local departments. We would suggest that copies be directed to:

The Governor's Task Force on Aging
Richard Bandelin, Budget Analyst
Department of Budget and Fiscal Planning
Dorsey Stewart, Department of Legislative Services.

We would like to be apprised of any other distribution planned should questions arise.

We appreciate the continued cooperation of your staff in completing this evaluation. We look forward to participating in future cooperative planning and evaluation.

Sincerely,

Richard W. Bateman, D.S.W.
Director

RWB:CB:1
WB:3803-3802

cc: G. Aronin
W. Walker
A. Irons

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SUMMARY OF FINDINGS

Socio-demographic Data

1. The average age of CHCS clients is 76 years. Males comprise 34% of the clients and females 66%. About 40% are black, 56% are white, and other races comprise the remaining 4%.

Client Risk Factors

2. Clients have an average of 2.14 medically defined conditions. The leading conditions by far are hypertension and arthritis. 88% of clients sampled reported one or more medically defined conditions.
3. The average functional impairment rating for males is 4.75, for females 3.74 and for the sample as a whole 4.09. Thus males are more functionally impaired than females. In terms of functional status alone, the sample may be regarded as moderately at risk of institutionalization.
4. Clients experienced an average of 3.4 personal/social conditions prior to their participation in the CHCS program. Among these the leading one was lack of transportation (62%), followed by loss of social contact (48%), and lack of information about community services (47%).
5. In the combined risk factor rating a score of 0 = not at risk of institutionalization; 1-3.99 = mildly at risk; 4-6.99 = moderately at risk; and 7+ = severely at risk. This rating method does not permit judgement regarding the severity of one of two risk factors, since conclusions are based on the number of risk factors. One very severe medical factor could cause a client to be severely at risk if another rating method were used whereas on the basis of the number of risk

factors, he is documented in this study as mildly at risk. With full recognition of this limitation, the findings show that the combined risk factor for males is 4.50, for females 3.25, and for the combined sample 3.43. Thus on the average males may be described as moderately of risk of institutionalization, while females are mildly at risk. The sample as a whole lies at the upper threshold of mild risk of institutionalization.

6. About 55% of the sample had resided in an institution at some time since April, 1973. Of these 87% were in an acute care hospital, 5% were in a mental hospital, and 8% were in a chronic care hospital, nursing home, or other institution. 94% of those who had been institutionalized stayed in the institution less than six months.

Pattern of Service Provision

7. On the average males receive 6.17 individual services, females 6.45 services, and the combined sample 6.35 services.
8. In terms of frequency of services, clients receive an average of 3.47 hours of service per week. The range of service provision is from 6.33 hours per week for homemaker cases to .32 per week for foster care.
9. The majority of clients (62%) is expected to require CHC services for more than two years. The majority of clients (68.5%) is anticipated to need the same intensity of service in the future as they now receive.

Assessment of Service Effectiveness

10. In general, the CHCS program is offering the right services to its clients, that is, services which do respond to their needs and which by implication ameliorate their situation to some degree.

11. 68% had no alternative resources available without CHCS. Workers state that services are completely adequate to meet clients' needs in less than half the cases (42.5%). Conversely, workers state that services are in some manner lacking or insufficient to meet clients needs in 57.5% of the cases. The data tend to show that although the right services are being provided, they are in general not being provided in sufficient volume.

12. CHC services were judged as definitely preventing institutionalization in about 39% of the cases; workers state institutionalization was probably prevented in another 39% of the cases. Services were judged as probably not preventing institutionalization in 16% of the cases and as definitely not preventing institutionalization in 6% of the cases.

Cost Analysis of the CHCS Program

13. CHCS (strictly defined) will spend 93.5% of its budget during FY 1976. The State's Management Improvement Plan (MIP) is responsible for the program's under-spending.

14. CHCS employed 64.5 direct service workers (17 social workers and 47.5 aides), as well as 2 supervisors and one clerical worker. This is 20.5 fewer workers than the budgeted 88 positions. Again, this is partially attributable to the State's MIP.

15. The direct cost is $7.64 per direct service worker hour. The direct cost per hour of service provided is $9.17. And the cost per hour of service including 35% overhead is $12.38.

16. The fiscal accounting system currently in use for the two components of the Community Home Care Services program (as well as for the Homemaker Services program) does not provide an exact accounting of expenditures to support community based services to the aged. Revision of the system is recommended to permit such functional accounting.

INTRODUCTION

Community Home Care Services in Maryland comprise "a coordinated social service program which makes available a comprehensive range of social and health related services to elderly persons 65 years and older and to their spouses, regardless of age, to enable them to remain in their own homes or in other independent living arrangements, consistent with their desires, ability and safety; or to assist them to attain appropriate alternative living arrangements as needed."[1] Components of the program include home care services, case aide services, protective services, health related services and foster care services. The goal of the program is "to prevent institutionalization or to make possible the return to the community from an institution, where this is in the best interest of the individual."[2]

To assure the proper implementation of the program, its policies and goals, the 1973 enabling legislation stipulates that the Department of Employment and Social Services (now the Department of Human Resources) shall "continuously monitor the effectiveness of this program and perform evaluative research of the program through the State Commission (now Office) on Aging."[3] To this end, the Department of Human Resources (DHR) and the Office on Aging (OoA) have cooperated in evaluating the Community Home Care Services (CHCS) program, and this report publishes both the process and the results of this cooperative study.

[1]DESS-SSA, Circular #74-99, February 6, 1974.

[2]Ibid.

[3]Annotated Code of Maryland, Article 88A, Section 86.2.

I

PREVIOUS RESEARCH

Although the body of theoretical literature concerning the needs of the elderly extends as far back as twenty years, CHCS as an alternative to institutionalization has been operational for only a comparatively short period of time. This fact is reflected in the minimal amount of published material on evaluation of these programs. From a more extensive review of literature, the following articles represent the most helpful ones in assisting with the conceptualization and design of this evaluation.

Bergman (The Gerontologist, 1973) reports that in a CHCS program in Israel in a 10-year period, only 15% of the clients sought readmission to institutional care after having been discharged from institutions into the community. The prime reasons for readmission were deterioration of health and functional capacity and the unavailability of appropriate health services in the community. This fact points out clearly the importance of clients' functional status in any evaluation of a CHCS program.

An evaluation of a home health care program by Wartski and Green (Medical Care, 1971) utilized with success a functional index--the Barthel Index--to measure the functional status of the program's patients. Testing showed that the Barthel Index agreed with other independent measures of physical disability. The Index is limited, however, in that it does not take into consideration the client's physical and social environment, which is of considerable importance in relation to providing home care. Thus a Barthel-like index is shown to be a reliable measure of functional status but only a partial measure of the client's total condition and therefore is to be used in conjunction with other measures.

Townshend (Processes of Aging, vol, 2, 1963) similarly described a method for measuring an old person's capacity to care for himself unaided in his own home. The method involves listing those activities which an old person living alone would need to perform and faculties he would have to employ to maintain life, assuming he received no assistance. Each activity is weighed from zero to two, based on the person's ability to perform it: without difficulty, with moderate difficulty, not at all or minimally. Based on the person's score, his ability to care for himself (functional status) can be measured in an objective manner. Such a method is most useful in assessing a person's need for service and, more broadly, in evaluating whether a CHCS program is serving clients who are truly at risk of institutionalization.

Thom and Stafford (The Gerontologist, 1975) outline a framework for evaluating home care programs. Since they describe an evaluation of a hospital based program, their method is not directly applicable to CHCS. Nevertheless, they offer some helpful ideas on conducting a goal model evaluation. Relying heavily on review of clinical records and statistical reporting systems, they examine the program objective by objective to determine whether it has achieved its goals in full, in part or not at all. They indicate that the evaluation must be conceptualized in terms of the interrelatedness of its various components, including who is not being served and why. They emphasize the need to determine clearly and explicitly the program components to be studied and the criteria against which they will be measured, as well as the need to know patients' perceptions and judgments of the program. These authors therefore set forth a helpful and adaptable evaluation model. In view of this current project's limitations, the article served as a guide to make explicit selection of scope, and to focus sharply on the

study's limitations, the most notable of which are omission of consideration of persons who are not CHCS clients and any assessment of clients' perceptions about the program.

Most recently, and locally, Stewart and Lickteig (1975) conducted an assessment of CHCS in Anne Arundel and Prince George's Counties. Their study, utilizing basically a case survey approach, found CHCS in those counties to be generally successful. Their survey instrument and final report served as models in the development of this study.

II

PURPOSE, GOALS, AND SCOPE OF THE STUDY

The overall purpose of the evaluation was to determine, within the constraints of time and other resources available to conduct the study, whether the CHCS program is actually accomplishing its major goal: to enable elderly person 65 years and older and their spouses, regardless of age, to remain in their own homes or in other independent living arrangements, consistent with their desires, ability and safety; or to assist them to attain appropriate alternate living arrangements as needed. At the same time the program was subject to a cost analysis to evaluate the efficiency with which CHC services are provided. Ultimately the efficiency of the program is measured in terms of cost per hour of service, both direct and indirect.

The study incorporated and built on elements of past studies, reviewed in previous sections, as well as other studies (see Bibliography), and attempted to utilize sound principles and methods of program evaluation as described in the standard evaluation sources. In order to accomplish the study's major purpose -- determination of the degree to which institutionalization is prevented or delayed--five goals were delineated:

- to identify and measure the extent of the medical, physical impairment and personal/social factors which lead elderly persons to apply for and to be accepted to receive CHC services;
- to isolate the service needs of the program's clients;
- to determine the pattern of services provided to ameliorate the clients' problems;
- to ascertain the extent to which CHC services are congruent with clients' needs; and
- to determine the extent to which CHC services actually prevent, reduce unnecessary institutionalization or facilitate the return of elderly persons from institutions to the community.

For purposes of this evaluation, CHCS is understood to embrace those categories of services which are subsumed under project code 720 through 723 on the DHR/SSA 248 form. These are: Community Home Care Services (720), Foster Care for the Aged (721), Protective Services for the Aged (722), and Aide Services (723). In addition, Homemaker Services (project code 420) being provided to CHCS clients are also accounted for, although clients receiving Homemaker Services but not CHCS are expressly omitted from the study. The Institutional Services code (714) was eliminated for purposes of this study. Thus the study takes into account the full picture of service delivery (including Homemaker Services) to CHCS clients. As stated previously, the Institutional Services code was excluded.

In summary, the scope of this evaluation of CHCS embraces that universe of clients bearing project codes 720 through 723 on the DHR/SSA 248 form whose cases are currently active in local departments of social services.

III

METHODOLOGY AND DESIGN

In attempting to supply information responding to these five goals the study did not utilize a rigorous evaluative research methodology. As desirable as that may have been, available resources did not permit an experimental or quasi-experimental design. Rather, the study relied heavily on the analysis of data gathered primarily by means of a survey of case records conducted by CHC workers in the local departments of social services in conjunction with their own best judgment about those cases. More specifically, data collection instruments, which were filled out by CHCS workers relying on case records and on their knowledge and judgment of clients, sought to supply the kinds of information which would respond to the five goals listed above, operationalized in specific detail. Thus the perceptions and judgments of the CHCS workers themselves constituted a major input into the evaluation process. There was no attempt to evaluate the validity of workers' responses; these were accepted at face value.

The information obtained from the survey instruments, one of which was to be completed for each active case in the sample, is of two main types: 1) factual data and 2) respondents' personal and professional judgment based on their assessment of the facts. Factual data include such items as clients' socio-demographic characteristics, prior institutionalization, services being provided, frequency of services, availability of other resources to maintain the client in the community. Judgmental information includes clients' service needs, the degree to which needs are met by services, the degree to which services prevent or delay

institutionalization. Items regarding the presence and degree of risk factors (medically defined conditions, functioning status, and personal/social conditions) are probably a mixture of factual data and judgmental information. The principal researcher is confident that his analysis of the resulting data has yielded fairly reliable findings and conclusions. Clearly, in the absence of a rigorously designed and executed experimental study definitive conclusions have not been obtained, nor could they have been expected. However, this report does assemble, organize, interpret and render available for decision-making more information about the CHCS program than has heretofore existed. This, the principal researcher believes, is the major contribution of this study.

As a distinct, yet closely related, element of the study, a cost analysis of the CHCS program was conducted to determine what is the financial cost of providing CHCS. The rationale for including a cost analysis as part of the study is that the scope of the CHCS program is so broad, embracing as it does a broad spectrum of social services for elderly people with widely varying needs, that there is a need to know clearly the distribution of funds among the program's component elements, as well as the efficiency with which the services are delivered. The analysis, carried out exclusively at the state level with the assistance of DER's Division of Budget and Finance, sought to identify the following factors: the numbers of CHCS social workers, serve-aides, and CHCS aides; the amount and proportion of funds allocated between the two CHCS components to direct service provision and to administration and other overhead; and the average cost per hour of CHC service.

The overall methodology of the study and the design of the survey form were reviewed in detail by representatives of the Social Services Administration and the Office of Program Planning and Evaluation from DHR, as well as by OoA personnel, and modifications were made on the basis of their critique and recommendations. The result of this review process was the outline of a study not only mutually agreed upon but cooperatively designed.

Since the survey form was quite lengthy, containing 29 questions with well over 200 separate pieces of information, it was necessary to arrange for electronic data processing. EDP services were purchased from the Baltimore Computer Utility Data Center of the Department of Budget and Fiscal Planning. This arrangement had the dual advantages of reducing the time required for tabulation of survey results to about one week and of permitting complex tabulations and correlations of multiple variables with ease. The data were broken out in over 200 tables for each variable by sex and by project code and sex, in raw numbers and percentages.

TIMING

The total amount of time to conduct the study, from February 10 through June 10, 1976, was quite limited for a study of the scope described above and requiring close interdepartmental coordination. A formal proposal with the survey form was submitted to OoA and DHR on March 8, 1976 and received comments for revision and official approval by March 19, 1976. Immediately thereafter SSA initiated contact with the local departments of social services to lay groundwork for the implementation of the study. During the first week of April the survey forms, together with detailed definitions and instructions for sampling and completion of the forms,

were mailed to the directors of the local departments. Three weeks were given for the completion and return of the surveys - until April 23, 1976. All completed forms were returned by April 30, 1976; they were delivered to the Data Center for processing during the first week of May. Computer print-outs became available for analysis in installments from May 10 to May 21, 1976. Analysis and interpretation began as soon as print-outs became available and continued through June 4, 1976. Meanwhile, the cost analysis portion of the study was initiated during the first week of April. This part of the evaluation was originally expected to be the simplest and shortest element, but it turned out to be the most elusive since the basic fiscal data were quite difficult to obtain (see detailed explanation in the Cost Analysis).

SAMPLING METHOD

From the regular program monitoring forms it was determined that the average monthly CHCS caseload was 2,454 statewide (not including 625 institutional services cases), with 1,773 cases distributed among the State's twenty-three counties and 681 carried in Baltimore City. With a caseload of this size it was calculated that in order to attain a 5% degree of error a 12.5% sample was required. So ideally, a 12.5% random sample, stratified by local departments, was to be drawn. However, in the actual sampling some necessary compromises were made. Since it was important to draw a reliable sample, in the smaller counties the one or two cases that a 12.5% sample may have dictated were insufficient. Therefore each of the smallest counties was directed to draw five cases, regardless of the percentage of the caseload the sample turned out to be. Conversely, in the larger counties it was necessary not to overburden

workers with too many surveys since it was estimated that each survey would require about thirty minutes to complete. So a few large counties were instructed to draw a sample smaller than 12.5%. The net result was that among all the counties 219 cases, a 11.3% sample, were drawn. In Baltimore City it was thought to be impractical to sample cases from every decentralized office, as well as from the central office. Therefore as a practical matter 20 cases were drawn from four decentralized units (five each from Govans, Liberty-Garrison, Mt. Royal and Upton) and 30 cases were drawn from the central office (five foster care and twenty-five other home care cases). Thus in Baltimore City the total sample of 50 cases amounted to only 7.3% of the city's CHCS caseload.

Statewide 269 cases were drawn, yielding a combined 11.8% sample. Of these 269 cases, fourteen were found to be invalid either because they were incompletely or incorrectly filled out and had to be discarded from the sample. This left a total of 255 cases, among which were 87 males and 168 females. Among these 255 cases, 67 received Homemaker Services, 223 received CHC Services, 15 received Foster Care Services, 16 received Protective Services, and 102 received Aide Services. These 255 cases constitute a 10.4% sample.

With a 10.4% sample of 2,454 cases the degree of statistical error is greater than 5% but less than 10%. Although this is a greater degree of error than would have been preferred, it is sufficiently small to provide a fairly reliable picture of the CHCS programs.

IV.

SURVEY DATA ANALYSIS

This part of the report and the following on cost analysis constitute the heart of the study. The material is largely descriptive in nature, although tentative conclusions have been reached with reference to some key issues. Additionally, where the data are subject to varying interpretations, questions have been posed as guides to further inquiry.

The raw data from the surveys are contained in over 200 separate tables produced by computer processing. The tables, which break data out 1) by sex and 2) by project codes and sex, range in size from 1 x 3 to 19 x 136. With such a wealth of data, it was clearly necessary to be rigorously selective in reproducing tables and reporting data. Throughout the following sections the attempt has been to select and comment on the most pertinent data, yet to present an accurate, fair and complete, though not exhaustively detailed, picture of CHCS. For the most part, the analysis concentrates on aggregated data for the CHCS program broadly defined (that is, projects 720 through 723 and 420). While tables disaggregate these data by project it was thought that presentation and analysis of these data would have been too lengthy and complex. The sheer volume of data would have overwhelmed the reader, all but obscuring the broader picture.[4]

The data are presented and analyzed in five sections. After a brief section of preliminary information on clients' dates of entry into the

[4]However, for the reader who desires more information, complete sets of computer print-outs are available at the Maryland Office of Aging. Also the computer tape is available to permit additional correlations of data.

program and on sources of referral, there follow sections presenting the socio-demographic characteristics of the sample, clients' risk factors, the pattern of service provision, and an assessment of the effectiveness of services.

PRELIMINARY DATA

Data were collected concerning at what point clients entered the CHCS program. It was found that 18.5% of the sample began receiving services prior to January 1, 1974 and that 20.9% began receiving services in 1974. In 1975 there was more than a 100% growth rate, in which 47.2% of the sample began receiving CHC Services. Initiation of services during the first quarter of 1976 appeared to be at a level consistent with the 1975 rates. The distribution by sex was about even in 1974, but the following year the number of females was 2.5 times that of males.

In addition, referral sources to CHC were examined. It was found that other agencies accounted for 40% of the referral sources, while clients' families accounted for 20%, friends for 13% and self-referrals for 13%.

SOCIO-DEMOGRAPHIC DATA

Table 1: Age distribution of the sample, by sex.

	Male (N=86)		Female (N=168)		Total (N=254)	
	#	%	#	%	#	%
Below 65	-	-	1	.6	1	.4
65 - 69	23	26.7	40	23.8	63	24.8
70 - 74	12	14.0	32	19.0	44	17.3
75 - 79	29	33.7	38	22.6	67	26.4
80 - 84	14	16.3	32	19.0	46	18.1
85 +	8	9.3	25	14.9	33	13.0
TOTALS	86	100.0	168	100.0	254	100.0

The first factor examined was the distribution of age by sex. It was found that all clients except one were age 65 or above. The majority of clients were 75 and above (57.5%) while 42.5% were below age 75. The mean age was 76 with the mean for females (76) about the same as males (75). Both males and females were more numerous in the 65 - 69 and 75 - 79 age cohorts. There also appears to be a larger decrease in male clients after the age of 79.

Table 2: Race, by sex

	Male (N=85)		Female (N=168)		Total (N=253)	
	#	%	#	%	#	%
Black	40	47.1	62	36.9	102	40.3
White	43	50.6	99	58.9	142	56.1
Other	2	2.3	7	4.2	9	3.6
TOTALS	85	100.0	168	100.0	253	100.0

The racial distribution of clients shows that the majority are white (56.1%). However, the percentage of blacks is large (40.3%) while the percentage of other minorities is much smaller (3.6%). It can also be seen that the racial distribution among males is fairly even between

blacks and whites. In contrast, there is a larger percentage of white females (63.9%) than black females (36.9%).

Table 3: Marital status by sex.

	Male (N=86)		Female (N=167)		Total (N=253)	
	#	%	#	%	#	%
Single	10	11.6	19	11.3	29	11.5
Married	31	36.1	11	6.6	42	16.6
Divorced	7	8.1	11	6.6	18	7.1
Separated	8	9.3	4	2.4	12	4.7
Widowed	30	34.9	122	73.1	152	60.1
TOTALS	86	100.0	167	100.0	253	100.0

A significant finding concerning marital status is that the majority of clients are widowed (60.1%). However, when this figure is broken down by sex it can be seen that almost 3/4 (73.0%) of the women are widowed whereas only about 1/3 of men are widowed (34.9%). The percentage of men that are widowed (34.9%) is comparable to the percentage of men that are married (36.9%). There are almost three times as many married men (N=31) as married women (N=11) with the percentages within each group accentuating the difference (36.0% of males and 6.6% of females are married). Overall it can be seen that 16.6% of clients are married whereas the remaining 83.4% do not have a spouse, in the most cases because they are widowed.

Table 4: Client residence by sex

	Male (N=86)		Female (N=168)		Total (N=254)	
	#	%	#	%	#	%
Own Home	36	41.9	67	39.9	103	40.6
Another's Home	10	11.6	20	11.9	30	11.8
Foster Home	4	4.7	9	5.4	13	5.1
Rented Commercial Rooms/Apts.	26	30.2	64	38.1	90	35.4
Licensed Health/Nursing Domiciliary Care Facility	1	1.2	-	-	1	.4
Room & Board Home	5	5.8	6	3.6	11	4.3
Legally unlicensed Domiciliary Home	2	2.3	2	1.2	4	1.6
Illegally unlicensed Domiciliary Home	2	2.3	-	-	2	.8
TOTALS	86	100.0	168	100.0	254	100.0

In considering the location of client residence, it was found that 40.6% of clients are living in homes they own. There was not a great deal of difference between male and female clients as 41.9% of males and 39.9% of females were located in homes they own. Many clients (35.4%) were found to be renting commercial rooms/apartments with the females showing greater frequency (38.1%) than males (30.2%). It was also found that 11.8% of clients are living in another person's home with the percentages of males and females about the same. The other five categories were found to account for 12.2% of the client population with 5.1% placed in foster homes, 4.3% living in room and board homes, and remainder placed in various forms of domiciliary care. The number of clients residing in domiciliary dwellings was relatively low.

Table 5: Living arrangements by sex

	Male (N=86)		Female (N=168)		Total (N=254)	
	#	%	#	%	#	%
Alone	30	34.9	96	57.1	126	49.6
w/spouse only	22	25.6	5	3.0	27	10.6
w/spouse & adult children	7	8.1	1	.6	8	3.1
w/spouse & other relatives	1	1.2	3	1.8	4	1.6
w/adult children only	6	7.0	26	15.5	32	12.6
w/other relatives only	3	3.5	12	7.1	15	5.9
w/non-relatives only	17	19.8	25	14.9	42	16.5
TOTALS	86	100.0	168	100.0	254	100.0

Almost one-half of clients (49.6%) were found to be living alone with a much higher percentage of females (57.1%) than males (34.9%) found to be living alone. On the other hand, a higher percentage of males (25.6%) were found to be living with only their spouses in comparison with only 3.0% of females living with only their spouses. The total percentage of clients living with their spouse only was 10.6%. Only 3.1% of clients were found to be living with both their spouse and adult children. However, 12.6% of clients were found to be living with only their adult children with the percentage of females (15.5%) over twice the percentage of males (7.0%). Relatively few clients were found to be living with their spouse and other relatives (1.6%) or with other relatives only (5.9%). It was found that the percentage of clients living with only non-relatives was 16.5% with the percentage of males (19.8%) greater than the percentage of females (14.9%).

Table 6: Income status by sex

	Male (N=87)		Female (N=168)		Total (N=255)	
	#	%	#	%	#	%
Employment	-	-	-	-	-	-
SSI	44	50.6	94	55.9	138	54.1
Social Security	66	75.9	118	70.2	184	72.2
Other Pension	19	21.8	26	15.5	45	17.6
No Income	-	-	1	.6	1	.4
Fee Paying Client	2	2.3	-	-	2	.8

Data were collected on clients's sources of income. It was found that only one client was receiving no income. However, even though virtually all clients are receiving income from some source, none is receiving their income by employment. Almost three-fourths of clients (72.2%) are receiving social security income. The percentage of females receiving social security (70.2%) is slightly less than the percentage of males (75.9%). However, the percentage of females receiving SSI grants (55.9%) is slightly larger than the percentage of males (50.6%). It was also found that the percentage of males receiving income from other pensions (21.8%) is greater than the percentage of females (15.5%) that have other pensions as a source of income. The total percentage of clients with income from other pension was found to be 17.6%.

One of the most notable points in Table 6 is that only two persons (.8%) are fee paying clients.

CLIENT RISK FACTORS

In this study an attempt was made to measure quantitatively the degree to which CHCS clients are at risk of institutionalization. This

was achieved by constructing three indices, which taken together constitute a measure of clients' risk factors. The three indices are the clients' (1) medically defined conditions, (2) functioning status, and (3) personal/social conditions. The number of medically defined conditions and personal/social conditions describe one dimension of the degree to which clients are at risk of institutionalization in the following ways: 0 conditions = not at risk; 1 - 3.99 conditions = mildly at risk; 4 - 6.99 conditions = moderately at risk; and 7+ conditions = severely at risk. In a similar fashion, clients' functioning status is gauged by weighted index in which numerical scores are assigned according to the manner in which clients are able to perform functions deem necessary for ordinary daily living (with no help =0; with help of another person = 1; does not perform the function =2). The resulting average scores describe the degree to which clients are functionally at risk of institutionalization: 0 = not at risk; 1 - 3.99 = mildly at risk; 4 - 6.99 = moderately at risk; and 7+ = severely at risk. Finally, a combined risk rating is calculated by weighing the functioning status score by a factor of two over the other two indices and calculating the average score. The rationale for the 2:1 weighing ratio in favor of functioning status is that in general persons' ability, or lack thereof, to care for themselves tends to be the more significant factor in institutionalization (Townshend, Process of Aging; Wartski and Green, 1971).

The limitations of such a method should be recognized. First, there was no attempt to measure directly the severity of medical or personal/social conditions, although those conditions which affect functioning status were subject to such a measure, imperfect as it was.

It is entirely possible that clients may be severely at risk of institutionalization because of one or two problems/conditions. The method used in this study would place erroneously some clients with one severe medical condition in the mildly at risk range. It would also place erroneously some clients with several minor conditions in the severely at risk range. Second, because of the definition of "without help of any kind" includes people who utilized mechanical devices such as wheelchairs, walkers, crutches, canes, etc., methods of risk tend to be lower than they would otherwise have been. These limitations in method necessarily imply limitation of conclusions which may be drawn. The reader should proceed with this caution in mind.

Medically Defined Conditions

In terms of medical conditions from which clients suffer, the following table displays only the predominant ones. Unfortunately, through a serious oversight, orthopedic disability and "heart condition" was omitted from the coded list of possible conditions; yet from a review of written responses in the "other"category heart condition proved to be one of the clients' main health problems. The result is that "heart condition" remains buried in the general category of "other" or is not reported at all. If the condition heart disease was not reported, the number of medically defined conditions could be artificially low, causing the "medically defined conditions" scores to be inaccurate.

Table 7: Clients medically defined conditions, by sex.

	Male (N=87)		Female (N=168		Total (N=255)	
	#	%	#	%	#	%
Arthritis	24	27.6	73	43.4	97	38.0
Caronic Lung disease	13	14.9	14	8.3	27	10.6
Diabetes	12	13.8	30	17.8	42	16.5
Hypertension	32	36.8	67	39.9	99	38.8
Mental Disorders	17	19.5	33	19.6	50	19.6
Post-operative condition	14	16.1	20	11.9	34	13.3
Stroke	20	23.0	24	14.3	44	17.2
Other	41	47.1	83	49.4	124	48.6

Here it is seen that excepting consideration of heart disease, hypertension stands out as the single most prominent medical condition of males (36.8%) and females (39.9%), as well as for the sample as a whole (38.8%). This is followed closely by arthritis (38.0%), then by mental disorders (19.6%), stroke (17.2%) and diabetes (16.5%). No great disparities in percentages between males and females appear, with the possible exception of arthritis, from which 43.4% of females suffer in contrast to 14.3% of males.

From another perspective, 10 clients (3.9%) do not suffer from any medical conditions; 226 clients (88.6%) have from one to three conditions; 18 (7.1%) from three to six conditions; and only one client has seven or more medically defined conditions. The average number of medically defined conditions for males is 2.18, for females 2.11 and for the total sample 2.14. The lack of a measure of the severity of each condition causes the averages to be less meaningful than is desirable.

Functioning Status

Reflected in the index of functioning status are the basic activities of daily living. The aim of the index is to describe clients' current (within three months previous to the completion of the surveys) functioning status as objectively as possible according to their usual (more often than not) performance of each function.

Seven basic activities were listed and rated according to clients' ability to perform each activity. The choices were "Without help of any kind," "With help of another person," and the third choice indicated that the clients do not perform the function more often than not. An unfortunate omission appears in this index. In an attempt to simplify and shorten the survey, "Without help of any kind" was defined operationally to include clients who may need mechanical devices such as canes, crutches, walkers, etc., but not assistance from another person. It would have been preferable to include an option specifying clients' need for mechanical devices. This omission tends to hide certain disabilities and to lower the risk status scores.

The index shows that a majority of clients are able to perform most functions, "Without help of any kind" (with the exception of preparing meals), from a large majority of clients (80.4%) who are able to move around the house without help, to just barely a majority (51.0%) who are able to negotiate stairs without help. A strong plurality (49.0%) is able to prepare their own meals without help. The function for which the greater percentages require help from another person are leaving the house to go outside (34.5%), bathing or showering (20.0%), and getting completely dressed (19.6%). Functions which the greatest percentages of clients are unable to perform are meal preparation (38.4%), negotiating stairs (30.2%), bathing (13.3%), and going outside (12.5%).

The following table shows how the sample is distributed by functioning status rating.

Table 8: Functioning status rating, by sex

	Male (N=87)		Female N=168		Total (N=255)	
	#	%	#	%	#	%
Not impaired (0)	12	13.8	45	26.8	57	22.4
Mildly impaired (1-3.99)	33	37.9	58	34.5	91	35.7
Moderately impaired (4-6.99)	16	18.4	31	18.5	47	18.4
Severely impaired (7+)	26	29.9	34	20.2	60	23.5
	87	100.0	164	100.0	255	100.0

Here it is seen that in each category, males and females are roughly equivalent. Slighly less than one quarter of the sample (22.4%) has no functional impairment, while 35.7% are mildly impaired. On the other hand, again slightly less than a quarter (23.5%) has a functional rating of seven or more and is judged to be severely impaired, while (18.4%) are judged moderately impaired. These data may be broadly interpreted to imply that at least 41.9% of the sample is solidly at risk of institutionalization in terms of functional status only (that is, without reference to medically defined conditions or personal/social condition). In summary, the mean functional impairment rating for males is 4.75, for females 3.74, and for the total sample 4.09.

Personal/Social Conditions

Unlike medically defined conditions and functioning status, the question on the survey pertaining to personal/social conditions was meant to identify the problems which the clients were experiencing at the time services were initiated. Respondents were asked to check from the listed items the problem areas which were important in determining the clients' need for services.

The results show that lack of transportation proved to be the problem experienced by the greater number of clients (62.0%), followed by isolation or loss of social contact (48.2%), lack of information about available community services (46.7%), inadequate home or family management (29.8%) inadequate housing or hazardous living conditions (21.6%), and equally by undiagnosed and/or untreated physical health problems and lack of educational, recreational or cultural opprotunities (21.2%). Less than 20% experienced the other listed problems (see survey instrument, question 15).

The following table shows the distribution of the numbers of personal/social conditions among the sampled clients.

Table 9: Personal/social conditions, by sex.

	Male (N=87)		Female (N=168)		Total (N=255)	
	#	%	#	%N	#	%
0 Conditions	2	2.3	5	2.0	7	2.8
1 - 3.99 Conditions	51	58.6	95	56.5	146	57.2
4 - 6.99 Conditions	23	26.4	52	31.0	75	29.4
7+ Conditions	11	12.6	16	9.5	27	10.6
	87	100.0	168	100.0	255	100.0

From this table it is apparent that the majority (57.2%) is clustered in the 1 - 3.99 conditions category, but a significant minority (40.0%) experienced four or more problems at the time of initiation of services. 97.2% of the sample experienced some personal/social problems at the time services were initiated. Only a very small percentage (2.8%) experienced no significant personal/social problems. The average number of problems for males was 3.34%, for females 3.43%, and for the combined sample 3.40%.

Table 10: Mean number of medical conditions and personal/social conditions, mean functional status scores and combined risk factor rating, by sex.

	Male	Female	Total
Medical conditions	2.18	2.11	2.14
Functional status score	4.75	3.74	4.09
Personal/social conditions	3.34	3.43	3.40
Client risk factor rating	4.50	3.25	3.43

In Table 10 the scores of the elements which comprise the risk factors, with functional status scores multiplied by a factor of two over the others, are combined and averaged to yield the overall client risk factor rating. The resulting scores show that males with an average risk factor rating of 4.50 tend to be more at risk of institutionalization than females, who score 3.25 on the index. The combined score for both sexes is 3.43. Thus in broad terms, it may be stated that while females tend to be mildly at risk of institutionalization, males tend to be at greater, or moderate risk.

A comparison of risk factor rating disaggregated by project is useful to display the variable degrees of risk of institutionalization among the different services to the elderly. Table 11 shows these data.

Table 11: Average client risk factor ratings, by project

	Home-maker (420)	CHC (720)	Foster Care (721)	Protective Services (722)	Aide Services (723)	Total
Medical conditions	2.07	2.18	1.60	1.94	2.34	2.14
Functional status score	4.91	4.05	5.33	3.63	3.64	4.09
Personal/social conditions	2.91	3.40	3.60	3.25	3.74	3.40
Client risk factor ratings	3.70	3.42	3.96	3.11	3.34	3.43

Here it is shown that clients receiving aide services average the greatest number of medically defined conditions (2.34) and personal/social conditions (3.74), but they have virtually the lowest functional status score (3.64). This seems to imply that clients tend to be assigned to aide services when they suffer from a relatively large number of medical and personal/social conditions, but at the same time are relatively able to care for themselves. Conversely, recipients of Homemaker Services have among the highest functional status scores (4.91), but fall in the middle range of medical conditions (2.07) and at the low extreme of personal/social conditions (2.91).

In terms of combined risk factor ratings, foster care clients score highest (3.96), followed by homemaker (3.70), CHC (3.42), aide services (3.34) and protective services (3.11). Although the data regarding risk factors are considered incomplete, all groups fall within the 'mildly at risk of institutionalization' category, although foster care clients are at the upper threshold of this category.

Prior Institutionalization

This section is concerned with clients' most recent prior institutionalization, which was defined operationally as inpatient residence in any institution, including a general hospital, for any length of time since April, 1973. Of the total sample of 255, three (1.2%) did not respond, 111 (43.5%) had not resided in an institution, and 141 (55.3%) had received some form of institutional care. Broken out by sex, roughly a third (35.6%) of the males had been in an institution, and almost two thirds (63.2%) had not, whereas among females there was a roughly equal distribution between those who had been institutionalized (51.2%) and those who had not (47.6%).

Among those who had received institutional care since April, 1973, the overwhelming majority (87.2%) were in acute care or general hospitals, while only 2.1% were in chronic care hospitals, 5.0% in mental hospitals, 3.5% in nursing homes and 1.4% in domiciliary care homes. Table 12 shows these data in greater detail.

Table 12: Distribution of clients receiving institutional care since April, 1973, by sex

Kind of Institution	Male (N=55)		Female (N=86)		Total (N=141)	
	#	%	#	%	#	%
Acute care hospital	49	89.1	74	86.0	123	87.2
Chronic care hospital	2	3.6	1	1.2	3	2.1
Mental Hospital	2	3.6	5	5.8	7	5.0
Nursing Home	1	1.8	4	4.6	5	3.5
Domiciliary Home	1	1.8	1	1.2	2	1.4
Other	-	-	1	1.2	1	.7
Totals	55	100.0	86	100.0	141	100.0

As may be expected with such a large proportion of this sub-sample having received care in general hospitals, the length of institutionalization falls overwhelmingly (93.6%) within the zero to six months range, while 2.8% received institutional care for six months to two years, and 2.2% for over two years. There was no response in two cases (1.4%). Table 13 shows the details of these data.

Table 13: Distribution of length of clients' institutionalization, by sex.

Length of stay in institution	Male (N=55)		Female (N=86)		Total (N=141)	
	#	%	#	%	#	%
< 6 months	50	90.9	82	95.4	132	93.6
6 months - 2 years	2	3.6	2	2.3	4	2.8
Over 2 years	1	1.8	2	2.3	3	2.2
No response	2	3.6	-	-	2	1.4
Totals	55	100.0	86	100.0	141	100.0

From these data on risk factors and prior institutionalization the overall impression is that, in general, CHCS is reaching a client population which is at some risk of institutionalization. Slighly more than half the sample had received some form of institutional care since April, 1973, but the vast majority of those who did received care in acute care or general hospitals; only a relatively small minority (12.7%) had received care in other than acute care or general hospitals. CHCS may be making possible clients' return to the community from acute care hospitals and preventing their long term institutionalization. It does not appear that the program is making possible to any great extent clients' return from long term care institutions. Perhaps the elimination of the Institutional Services code affects this finding.

In addition, the number of clients that had been in an institution in the past three years was examined by the project codes under which they were receiving services. The following table displays the findings. It must be remembered that many clients are listed under more than one project code (65.3%) and therefore the total at the right represents the "true" totals and not the sum of the figures of each project code.

Table 14: Prior institutionalization, by project

	Homemaker (N=67)420		CHC (N=223) 720		Foster Care (N=15) 721		Protective Services(N=16) 722		Aide (N=102) 723		Total (N=252)	
	#	%	#	%	#	%	#	%	#	%	#	%
Yes	42	62.7	128	57.4	7	46.7	7	43.7	63	61.8	141	55.9
No	25	37.3	95	42.6	8	53.3	9	56.3	39	38.2	111	44.1
Totals	67	100.0	223	100.0	15	100.0	16	100.0	102	100.0	252	100.0

As the table shows, clients receiving homemaker services, CHC services and aide services have a higher incidence of prior institutionalization than clients receiving foster care and protective services. It is important to note that the former group (project codes 420, 720 and 723) have much larger numbers of clients represented than the latter (Project codes 721 and 722). It was found that 62.7% of those receiving homemaker services, 57.4% of those receiving CHC services, and 61.8% of those receiving aide services had been in an institution within the previous three years. However, in view of the small number receiving foster care and protective services, it may not be valid to generalize about the lower incidence of prior institutionalization among these clients.

Pattern of Services Provision

After an objective description of the sample's risk factors and an assessment of the degree to which it is at risk of institutionalization, together with the recent history of prior institutionalization, logically the next step is to describe the pattern of services which are provided to prevent or delay institutionalization, in order subsequently to arrive at an assessment of the match between problems, needs and services. This section, compiled from questions 17 and 18 of the survey instrument (see Appendix A), represents a detailed description of the pattern of services provision in the CHCS program.

The survey instrument identified ten basic categories of services and the most common individual services within six of those categories, as well as the categories of individuals who provide services. Respondents were asked to check each individual service provided within the three months prior to the completion of the survey (since January, 1976) and the primary service provider. (If more than one category of provider gives service to a client, respondents were instructed to check the one who usually - more often than not - provides the service.)

Here the results of the analysis of this part of the instrument will be discussed under three main headings: categories of services, individual services grouped under the categories, and frequency of services.

Categories of Services

The ten categories of services and the pattern of their provision are displayed in Table 15.

Table 15: Categories of services by sex

Category	Male (N=87) #	Male (N=87) %	Female (N=168) #	Female (N=168) %	Total (N=255) #	Total (N=255) %
Housekeeping/Chore	36	41.4	89	53.0	125	49.0
Home Management	49	56.3	105	62.5	154	60.4
Health related	57	65.5	119	70.8	176	69.0
Counseling	50	57.5	93	55.4	143	56.0
Protective	38	43.7	57	33.9	95	37.2
Assistance - living arrangements	17	19.5	29	17.3	46	18.0
Foster care	5	5.7	9	5.4	14	5.5
Transportation/Escort	53	60.9	106	63.1	159	62.3
Referral	52	59.8	99	58.9	151	59.2
Institutional	3	3.4	4	2.4	7	2.7

Here it is shown that the majority of clients receives (in descending order of utilization) health related services (69%), transportation/escort servoces (62.3%), home management services (60.4%), referral to other community services (59.2%), and counseling services (56.1%). A large minority receives housekeeping/chore services (49%) and protective services (37.2%). A smaller minority receives assistance in obtaining appropriate living arrangements (18%), while very small percentages receive foster care (5.5%) and institutional services (2.7%). (It should be noted here that the small percentage receiving institutional services is not reflective of the proportion of CHCS clients actually receiving institutional services throughout the State, since this CHCS project was eliminated from the scope of this evaluation. The small percentage reported apparently reflects services provided to clients who had resided or are residing in an institution but who are not listed on the DHR/SSA 248 form as receiving services

under project code #724, designed "Institutional Services.") No major discrepancy between the sexes appears among the categories, except in housekeeping/chore services, in which 41.4% of males compared to 53% of females receive services, and in protective services, in which 43.7% of males in contrast to 33.9% of females receive services.

From a very preliminary assessment some of the most frequently provided categories of services appear to correlate positively with a number of the risk factors from the previous part of this report. For example, the fact that health related services are provided to about 70% of the sample tends to correlate roughly with the finding that about 96% suffer from at least one medical condition. In addition, the provision of transportation/escort services to about 62% of the sample correlates almost perfectly with the 62% who lack transportation. On the other hand, while about 60% receive home management services and 49% receive housekeeping/chore services, inadequate home or family management was reported for only about 30%, at the time of initiation of service. The reason for this may be that additional needs are identified after services are initiated.

Individual Services

Individual services are grouped under six of the ten categories of services. The table reflecting the pattern of individual services and categories of services provider are extremely lengthy, detailed and complex - a 3 x 36 table and a 3 x 180 table. For this reason the pertinent table are not included in this report, but the major pattern have been extracted from the tables and are presented here.

The ten categories of services are listed below and are described briefly in terms of the individual services listed under six of them and

of the service providers for all of them It should be noted that the percentages were calculated from two different bases. In each case, percentages describing clients receiving individual services are calculated from the entire sample (N=255), whereas percentage distributions describing service providers for each individual services use the number of clients receiving that service as 100%. Although this method of using different bases to calculate percentages tends to be somewhat complicated, it yields more meaningful data.

(1) Housekeeping. Light housecleaning (42.7%) and laundry/ironing (31.8%) are the most commonly provided individual services under this category, and as may be expected, they are provided primarily by aides (52.3%) or homemakers (44.9%). Preparation of food is provided to only 14.9% of the sample primarily by aides (39.5%) and homemakers (55.3%). The remaining housekeeping services - preparation of special diets, minor repairs, mending/sewing and other housekeeping services - are each provided to less than 3% of the sample.

(2) Home Management. Under the home management heading, 42.3% of the sample receive shopping services, mostly from aides. Smaller percentages receive the remaining home management services: utilization of food stamps (22.3%) budgeting (19.6%), banking/payment of bills (18.8%), meal planning, (4.7%) and other home management services (7.1%). These services are provided primarily by aides or homemakers, except for budgeting and "other" home management services, which are provided primarily by social workers.

(3) Health related services. In this category 55.3% of clients receive assistance in obtaining health care, provided overwhelmingly by social workers, and 25.5% receive assistance in following treatment,

provided mostly by social workers but also in smaller proportions by aides and homemakers. Provided in smaller proportions are personal care 9.8%, telephone/telecare (11.4%) and other health related services (8.6%). Telephone/telecare is offered primarily by social workers, while personal care is given by homemakers in a ratio of about 2:1 over aides.

(4) Counseling. Counseling provided to enable clients to remain in their own homes, is offered to 56.1% of the sample. As may be expected, counseling is conducted virtually exclusively by social workers.

(5) Protective services. In this category counseling to clients and/or relatives, guardian, etc., is provided by social workers in 33.3% of the cases. Securing legal services and other protective services are each provided to less than 5% of the sample.

(6) Assistance in obtaining living arrangements was offered to 18% of the sample, overwhelmingly by social workers.

(7) Foster Care services, offered to 5.5% of the sample, are provided exclusively by social workers.

(8) Transportation/escort. Under this category 49.4% of the sample receive transportation to medical/dental facilities, while 37.2% receive transportation to shopping facilities. Only small portions of the clients receive transportation to recreational facilities (8.6%) or to other kinds of facilities (5.5%). Among those who receive tranportation to medical/dental facilities, the services is provided by aides in 54% of the cases, by homemakers in 21%, by serve-aides in 9%, and by social workers in 16% of the cases. This distribution is roughly similar for the other tranportation services too.

(9) Referrals to other services. Under this heading, 23.9% of clients are referred to medical care services; 17.2% to nursing services;

14.9% to home delivered meals; 11.8% to congregate meals; and 10.6% to Geriatric Evaluation Service. Only 3.5% are referred to day care and 14.9% to a variety of other community services. Referrals are made almost exclusively by social workers.

(10) Institutional Services, as noted earlier, are underrepresented because they were virtually eliminated from the study; only 2.75% of the sample receive these services, provided mainly by social workers.

Individual Services Summary

The foregoing description of the distribution of categories of services and individual services among the sample may be summarized succinctly in the observation that on the average males receive 6.17 services, females 6.45 services, and males and females combined receive an average of 6.35 individual services.

The average number of services was also calculated for each project (though unfortunately due to programming error not to two decimal places, as was done for the aggregated date) for the three month period prior to the collection of data. The mean number of services by project are as follows: homemaker services (420) - 8, CHC services (720) - 7, foster care (721) - 4, protective services (722) - 5, and aide services (723) - 7. Here it is seen that the average numbers of services are higher for homemaker services, CHC services and aide services, all of which have large numbers of clients in comparison to foster care and protective services. Also, it is interesting to note that, if foster care is omitted from consideration because of its special nature, homemaker services clients both have the highest risk factor rating (3.70) and receive the highest average number of individual services (8). This tends to support the proposition that clients' degree of risk factors and services to respond to the needs created by them are positively correlated.

Frequency of Services

Not only an analysis of the categories of services and individual services but a presentation of the frequency of services is an important element in any description of the pattern of service provision to the client population.

This section shows frequency of services by (1) the distribution of services over discrete time intervals (hours per week and, less significantly, days per week) and by mean days and hours of service per week.

Table 16: Distribution of hours of service per week, by sex.

	Male (N=87)		Female (N=168)		Total (N=255)	
	#	%	#	%	#	%
< 1 hour	29	33.3	45	26.8	74	29.0
1 - 1.99 hours	13	14.9	22	13.1	35	13.7
2 - 4.99 hours	32	36.8	72	42.9	104	40.8
5 - 7.99 hours	7	8.1	16	9.5	23	9.0
8 or more hours	6	6.9	13	7.7	19	7.5
	87	100.0	168	100.0	255	100.0

In Table 16 it is shown that fully 29% of the sample receive less than one hour of service per week and, at the other extreme, that only 16.5% receive five or more hours of service per week. A plurality (40.8%) falls between two and five hours, while an additional 13.7% receive between one and two hours of service. These data take on added meaning in relation to the average number of days and hours of service per week, shown in Table 17.

Table 17: Mean days and hours of service delivery per week, by sex

	Male (N=87)	Female (N=168)	Total (N=255)
days per week	1.10	1.19	1.16
hours per week	3.48	3.46	3.47

Here it is shown that on the average clients receive about three and a half hours of service per week. That this average may be low is supported by data from similar programs. For example, in a CHCS-like program in Coventry, England, although the amount of service time allocated to clients varies from 1-2 to 9-10 hours weekly, the average amount of service is 4.5 hours per week, and this average was found to be "in many cases totally inadequate and insufficient (sic) to allow the elderly in remaining in their own homes."[5] It is important to note that the 3.47 average is an average for a comprehensive program which includes services provided by social workers only in small amounts of time.

The frequency of service delivery was also calculated for each project in terms of mean days and hours of service delivery per week, and the resulting data are shown in Table 18.

Table 18:

Mean days and hours of services delivery per week, by project

	Homemaker (420)	CHC service (720)	Foster care (721)	Protective services (722)	Aide services (723)	Total
Days/ week	1.92	1.22	.37	.90	1.30	1.30
Hours/ week	6.33	3.61	.32	3.94	3.47	3.47

A day of service is defined as a day or any part of a day in which a service contact is made with a client. A client usually is served by a team of service providers. For example, he usually receives services from a social worker and an aide. The table shows that on the average, service contact is made one or two times per week with homemaker, CHCS services and aide services

[5]It was also found that frequency of service depends more on availability of help than on clients' needs. Home Help Services for the Aging Around the World, (The International Federation of Aging, Washington D.C.), p. 25.

clients, and less than once a week for foster care and protective services clients. Homemaker clients have the highest mean days of service per week (1.92), in comparison with 1.30 days of service per week for all projects combined.

In terms of hours of services per week, again homemaker clients receive a dramatically higher average (6.33) than the others. These data serve to confirm the positive correlation between degree of risk factors and the volume of services to respond to the needs created by them among homemaker clients. Although protective services clients average .90 days of services per week, 3.94 hours of service are provided in that time. This articulately demonstrates the often complicated and time-consuming nature of protective services. CHC services and aide services clients receive approximately three and a half hours of service per week (3.61 and 3.47 hours respectively) - about the same as the combined average (3.47 hours). Finally, foster care workers appear to provide service to their clients about every third week for an hour. Once a placement has been made in a foster home, this frequency seems to meet expectations and needs, on the assumption that the foster home is responding to the clients' daily needs.

Projected Need for Continuing Services

In addition to describing the current pattern of service provision, in view of the fact that CHCS is a component element of long-term services it is valuable to analyze in terms of duration of services to clients. Projected need is analyzed in terms of duration of services and intensity of services and is displayed in Table 19 and 20

Table 19: Duration of services, by sex

	Male (N=86)		Female (N=167)		Total (N=253)	
	#	%	#	%	#	%
6 months	10	11.6	19	11.4	29	11.5
6 months - 2 years	24	27.9	43	25.7	67	26.5
2 years	52	60.5	105	62.9	157	62.0
Totals	86	100.0	167	100.0	253	100.0

Table 20: Intensity of service, by sex

	Male (N=83)		Female (N=165)		Total (N=248)	
	#	%	#	%	#	%
At less intensity	7	8.4	22	13.3	29	11.7
At same intensity	59	71.1	111	67.3	170	68.5
At greater intensity	17	20.5	32	19.4	49	19.8
Totals	83	100.0	165	100.0	248	100.0

Here the operational meaning of "duration of service" is clear from Table 19, but the meaning of "intensity of service" requires explanation. "At less intensity" means that the client is anticipated to need less service time and/or fewer services; "at same intensity" means the client will need no significant change in the pattern of service provision for the foreseeable future' "at greater intensity" means the client is anticipated to require more service time and/or additional services.

The date show that CHCS in fact is provided on a long-term basis. Only 11.5% of the sample are anticipated to require services for less than six months, while another 26.5% are expected to need service for between six months and two years. The majority (62.0%) is expected to require CHC services for more than two years. No significant differences in this pattern of distribution exists between the sexes.

In terms of intensity of service, while 11.7% (virtually the identical percentage anticipated to require services for less than six months) are

expected to need services at less intensity, a large majority 68.5%, is anticipated to require no significant change over time in the pattern of service provision, and only 19.8% are expected to need services at greater intensity. These data, when coupled with the tendency toward increasing deterioration and disability among the aged over time and with the average of 3.47 hours of service per week, raise some important questions. Since this finding (68.5%) is inconsistent with the respondents' estimates that in 57.5% of the cases services are somewhat lacking and insufficient to meet client needs, the reliability of this response is questionable. Have respondents realistically assessed future needs? Have they (unconsciously?) taken into consideration anticipated limited availability of service? Does the provision of CHC services, even for an average of three and a half hours per week, tend to minimize further client disability? Are three and a half hours of service per week sufficient to respond to clients' needs, even when greater disability may be likely to occur in the future? The questions are many and the answers are by no means obvious. The issue of frequency of services requires additional study.

Resources Prior to CHCS

One additional element in this part of the report is interesting - how clients "managed" prior to receiving CHC services. The focus here is on the resources that were available to and used by the clients in meeting their needs. Table 21 shows these resources.

Table 21:

Clients' resources in meeting needs prior to CHC services, by sex.

	Male (N=87)		Female (N=168)		Total (N=255)	
	#	%	#	%	#	%
No CHCS needs	12	13.8	29	17.3	41	16.1
Needs unmet	44	50.7	66	39.3	110	43.1
Institution	8	9.2	13	7.7	21	8.2
Spouse	16	18.4	8	4.8	24	9.4
Adult children	21	24.1	32	19.1	53	20.8
Other relatives	11	12.6	31	18.4	42	16.5
Unpaid/non-relatives	7	8.1	30	17.9	37	14.5
Paid non-relatives	10	11.5	30	17.9	40	15.7
Homemaker service	5	5.7	14	8.3	19	7.4
Other	6	6.9	11	7.1	18	7.1

Of the total sample, 16.1% were judged to have no need of CHCS prior to their application for services; for 43.1% it was judged that their needs remained essentially unmet. The resources available and utilized to meet clients' needs are (in descending order utilization): adult children (20.8%), other relatives (16.5%), paid non-relatives (15.7%), unpaid non-relatives (14.5%), then spouse, homemaker services and other resources (all under 10%). Since more than one resource per client is possible, it is difficult to generalize from these data. In general, it seems that the major resources utilized by clients prior to their participation in CHCS is their own family, both nuclear and extended. 16.7% paid for services prior to their participation in the program.

With reference to whether these resources are still available to be utilized by clients, 52 respondents (20.4% of the sample) did not answer. Of those who did respond 43.8% indicated that the resources are no longer available and 56.2% indicated that the resources remain available to clients. No significant difference exists between the sexes. It must be remembered that the types of resources mentioned in this question (spouse, adult children, other relatives, homemaker) do not necessarily negate the need for CHC services. Still, some interesting questions arise. Has CHCS simple replaced these other resources? Or is the program supplementing them (or vice - versa)? If these resources are no longer being utilized, why not? Does the possible continued utilization of these other resources help to explain the average number of service hours per week? Further study is needed to answer these questions.

Assessment of Service Effectiveness

An assessment of service effectiveness, that is, of the degree to which the goal of the CHCS program - prevention of institutionalization is actually being achieved, was attempted from several perspectives: relevance of services to needs, adequacy of services in meeting needs, availability of alternative resources in the absence of CHCS, and, finally, a direct assessment of the degree to which CHC services prevent institutionalization. It must again be stressed here that the sole source of assessment was the personal and professional judgment of the clients' social workers. Responses are essentially general qualitative judgments

which rely on variable interpretations of the questions posed in the survey. The questions themselves were not posed in any rigorously defined, quantifiable or absolutely univocal fashion. Therefore the responses should not be regarded as definitive or beyond question. Rather, this section purports simply to present an almost impressionistic assessment of program effectiveness.

Relevance of Services

Table 22 shows an assessment of the degree to which CHCS services are appropriate or relevant to clients' needs.

Table 22: Relevance of CHC services to client needs, by sex

	Male (N=86)		Female (N=168)		Total (N=254)	
	#	%	#	%	#	%
Relevance of Services Needs						
Complete	55	64.0	105	62.5	160	63.0
Partial	22	25.6	51	30.4	73	28.7
Minimal	7	8.1	10	5.9	17	6.7
Not at all	2	2.3	2	1.2	4	1.6
Totals	86	100.0	168	100.0	254	100.0

Here it is shown that in the greater majority of cases (63%) services being provided to clients are completely appropriate or relevant to their needs, and that in another 28.7% of the cases services are at least partially relevant. Conversely, in only 6.7% of the cases are services minimally relevant, while in 1.5% they are judged not at all relevant. Thus it appears that in general the CHCS program is offering the right services to its clients, that is, services which truly respond to their needs and which by implication ameliorate their situation to some degree.

Adequacy of Services

Table 23: Adequacy of CHC services to client needs, by sex.

	Male (N=86) #	Male (N=86) %	Female (N=168) #	Female (N=168) %	Total (N=254) #	Total (N=254) %
Needs are met:						
Completely	37	43.0	71	42.3	108	42.5
Partially	33	38.4	77	45.8	110	43.3
Minimally	14	16.3	15	8.9	29	11.4
Not at all	2	2.3	5	3.0	7	2.8
Totals	86	100.0	168	100.0	254	100.0

In juxaposition Table 22 and 23 show that, while in a majority of cases (63%) services are completely relevant to needs, services are completely adequate in meeting clients' needs in less than half the cases (42.5%). Strictly interpreted, this implies that in more than half the cases - fully 57.5% - services are in some manner lacking, insufficient to meet clients' needs. In 43.3% of the cases services are deemed partially adequate, while they are not at all minimally adequate to needs in 14.2% of the cases.

Although the data do not unequivocally reveal why in the majority of cases services are not fully adequate to needs, from a comparison of the "relevance" data (Table 22) to the "adequacy" data (Table 23), to the data on mean hours of service per week, it may be inferred that although the right services are being provided, they are in general not being provided in sufficient volume. This may at least partially explain why in a majority of cases services are judged not completely adequate to clients' needs.

Availability of Alternative Resources

The question was also asked whether in the absence of CHCS other resources would be readily available and accessible to prevent clients' institutionalization. The attempt here was to determine inasmuch as possible whether CHCS is filling a social service gap or whether it is easing the burden on the other personal or community resources. Table 24 shows the pattern here.

Table 24: Availability of alternative resources to prevent institutionalization, by sex.

	Male (N=85)		Female (N=168)		Total (N=253)	
	#	%	#	%	#	%
Resources not available	57	67.1	116	69.1	173	68.4
Resources available	28	32.9	52	30.9	80	31.6
Totals	85	100.0	168	100.0	253	100.0

Here it is shown that in about two-thirds of the cases for both males (67.1%) and females (69.1%) and for the sample as a whole (68.4%) alternative resources to prevent institutionalization in the absence of CHCS are not available. (How these data are to be reconciled with the data from Table 21 on p. 42 is not clear.) For the minority for whom it was judged that other resources <u>are</u> available (31.6% of the sample), it was then asked what these are. Table 25 shows how the alternatives for that 31.6% of the sample are distributed. The question did not ask the respondents to indicate the quality of the alternative resources. It may be that the act of applying for CHCS indicates that the alternative resources are inadequate in some respect.

Table 25: Alternative resources, by sex.

	Male (N=28)		Female (N=52)		Total (N=80)	
	#	%	#	%	#	%
Resources						
Own financial resources	4	14.3	8	15.4	12	15.0
Other household resources	18	64.3	30	57.7	48	60.0
Private/voluntary organizations	7	25.0	16	30.8	23	28.7
Other resources from public agencies	9	32.1	15	28.8	24	30.0

Since in Table 25 the categories of resources are not mutually exclusive, more than one per client could have been, and in many cases were, checked. Thus the percentages are not cumulative. As may be expected, a small proportion (15%) is able to rely on their own financial resources. (These twelve cases amount to only 4.7% of the entire sample.) Again not surprisingly, 60% are able to rely on other household resources, which were defined in the survey to include living with an/or receiving assistance from family or friends. About 29% were thought to be able to receive assistance from private or voluntary agencies, organizations, etc., while 30% could receive help from other government (municipal, county or state) agencies. It must be remembered, though, that availability of alternative resources does not necessarily imply adequacy of those resources.

The general conclusion from the data in Table 24 and 25 is that in 68% of the cases CHCS does fill those gaps in the network of social services for the aged necessary to prevent institutionalization. For the remaining persons served, this does not necessarily mean that the

needs now being met by CHCS would be met if CHCS were withdrawn or that other resources would be provided or appropriate to meet these needs.

Prevention of Institutionalization

The major point at issue in this part of the study is whether and to what degree CHCS actually prevents institutionalization of the impaired elderly. This point is addressed explicitly in the survey's final question, and the resulting data are shown in Table 26.

Table 26: Prevention of institutionalization, by sex

	Male (N=86)		Female (N=168)		Total (N=254)	
	#	%	#	%	#	%
Do CHCS services prevent clients' institutionalization?						
Definitely yes	37	43.0	63	37.5	100	39.4
Probably yes	28	32.6	71	42.3	99	39.0
Probably no	16	18.6	24	14.3	40	15.7
Definitely no	5	5.8	10	5.9	15	5.9
Totals	86	100.0	168	100.0	254	100.0

The precise wording of the question as it appears in the survey is as follows: "In your opinion, are the CHC services currently provided to the client effectively preventing the client's institutionalization?" The data show that among males a plurality (43%) responded "Certainly yes," while among females the plurality (42.3%) responded "Probably yes." The sample as a whole is about evenly distributed (39% each) between "certainly" and "probably yes". At the other end of the spectrum, for both males and females, and for the total sample, in only about 6% of

the cases was it judged that CHCS was definitely not preventing institutionalization.

Since the shades of meaning between "definitely" and "probably" are not all that clear-cut and there is no precise line of demarcation between these distinctions, it is useful to aggregate the positive negative categories together. When this is done, it is seen that among males CHC services were judged either probably or definitely to prevent institutionalization in 75.6% of the cases, among females in 79.8% and for the whole sample in 68.4% of the cases. These are impressive majorities. Conversely, CHC services were judged probably not to prevent institutionalization in 15.7% of the cases and certainly not to prevent institutionalization in 5.9% of the cases. Thus, overall the response to the question of prevention of institutionalization tends to be affirmative. Further study is needed for clarification of the implications of the 21.6% of cases where CHCS is judged either probably or certainly not preventing institutionalization. In such a study, consideration should be given regarding how many of these clients have been determined to need institutional placement and, for example, may be waiting for an available bed.

V

COST ANALYSIS OF COMMUNITY HOME CARE SERVICES

In this part of the report "Community Home Care Services" refers to all community based services provided to the elderly through (1) CHCS strictly defined (the 86 positions funded in FY1976 through Sections 84-87 of article 88A of the Annotated Code of Maryland), and (2) that portion of Services to Adults allocated to the aged (the equivalent of 75 positions). The cost analysis will first present the projected expenditures for fiscal year 1976 for each of these components and compare them to their budgets. Then, using data on direct service personnel in combination with projected expenditures, the estimated cost per hour of service for the CHCS program will be presented.

Obtaining the basic data which was required to project expenditures accurately through June 30, 1976 and to estimate cost per hour of service proved to be a major unanticipated difficulty. Budgets for CHCS were fairly easy to attain, as were computer print-outs showing expenditures to date and for the current month. However, although the portion of Services to Adults allocated to the aged was broken out separately from its program budget, the records of FY1976 expenditures for this program did not distinguish between services to the aged and services to the non-aged; rather, these costs were aggregated together. So there was unfortunately no direct way to obtain reliable, accurate information about actual expenditures for the portion of Services to Adults applied to the aged and about Community Home Care Services as a whole. In the absence of direct data, a rough estimate was made. To compound the problem, apparently because of confusion in terminology when the local departments of social services reported the numbers of social workers actually providing

services to the elderly, they did not distinguish between CHCS workers and Services to Adults workers. The aggregate number of workers reported between these components (96.6) exceeds the number of positions allocated (92) by 4.6 workers. How these positions are actually distributed between the two components remains unknown. An educated guess has been made, and these figures were used in computing the cost per hour of service for CHCS.

Finally, only after projections were made and unit costs were estimated did the principal researcher learn that Baltimore City salaries are not reflected in the computer system which provides data on program expenditures. Thus the computations were completely invalid, and many man-hours of work were utterly wasted. After several days' delay, when accurate and complete figures were obtained, it became apparent that in Baltimore City for some unexplained reason CHCS workers' and aides' salaries were charged not to CHCS but to the Homemaker program. Thus it became necessary to estimate the salaries of these workers and to charge them to CHCS in order to arrive at an estimate of CHCS cost per hour of service.

In short, the data base for this cost analysis was difficult to obtain and still contains significant gaps, some of which were filled by estimating percentage distributions of expenditures. The analysis should therefore be regarded as offering a less-than-precise estimate of the cost of providing Community Home Care Services to the aged in FY1976.

Fiscal View of Community Home Care Services Program

In Table 27 a synoptic view of the fiscal status of the CHCS program for FY1976 is provided. The figures in this table and throughout the analysis are based on FY1976 appropriations and on records of actual expenditures through March 1976.

Table 27: FY1976 budgets, end of year projections of expenditures and percentages of projections to budgets for CHCS components

Project	Budget	Projected expenditure through 6-30-76	Percentage of projected expenditure to budget
CHCS			
Federal - Title XX	$ 959,729		
General - matching	319,910		
General - ineligibles	67,349		
	1,346,988		
Purchase of Service -	525,573		
Sub-total	$ 820,815	$767,611	93.5%
Services to Adults			
Federal - Title XX	773,505		
General - matching	257,835		
General - ineligibles	54,281		
Sub-total	$1,085,621	$472,598	43.5%
Total CHCS Program	$1,906,436	$1,052,387	55.2%

For each of the component projects the Federal Title XX Contribution, the State general matching funds and the State general funds for Title XX ineligibles are broken out and sub-totaled. For CHCS the purchase of service money ($525,573) has been subtracted since purchased services do not fall within the scope of this study. The total budget for the combined CHCS program, less purchase of service monies, is $1,906,436 for FY1976.

Based on actual expenditures through March 1976 projections of program expenditures for the fiscal year were calculated. For each of the component programs, expenditures for the last three months (April-June) were projected by multiplying one half of March's payrolls (to approximate one bi-weekly pay period) x 7.1 (the number of pay periods from 4-1-76 to 6-30-76). Then the fringe benefits were added by multiplying the total payroll by 1.135 (fringe benefits amount to 13.5% of the payroll).

For Services to Adults it was estimated that 40% of the total expenditures would be applied to the aged. Finally other (non-salary) expenditures were estimated for the final quarter. This methodology is shown in Table 28 below.

Table 28: Projection of expenditures for CHCS components from April 1 through June 30, 1976

CHCS		
Salaries for March - Counties	$52,406	
Salaries for March - City	------	
Each bi-weekly payroll	26,203	
x 7.1 pay periods from 4-1 to 6-30-76		$186,041
+ Fringe benefits (13.5%)		25,115
+ other expenses		10,500
Total		$211,656
Services to Adults		
Salaries for March - Counties	$76,337	
Salaries for March - City	20,094	
Total	96,431	
Each bi-weekly payroll	48,215	
x 7.1 pay periods		$342,330
+ Fringe benefits (13.5%)		46,214
+ other expenses		9,000
Total		338,544
x CHC share (40%)		$155,418

In this table it will be noticed that no Baltimore City salaries are charged against the CHCS component. Salaries for Baltimore City workers are being charged to Homemaker Services. The reason why this is being done is not known, but the consequences are that the expenditures for the CHCS component are artificially low, while those of Homemaker Services are artificially high. This fact made it necessary to estimate Baltimore City CHCS salaries and add them into the projected expenditures

for the year (see Appendix B for details).

Table 29 shows a breakdown of expenditures for each component of the CHCS program.

Table 29: Estimates of expenditures through June 30, 1976 for CHCS components

Program				
CHCS				
-actual to 3-31, counties & non-salary city	$327,873			
-Balto. City salaries	165,482			
-Fringe benefits	62,600			
		$555,955		
-CHC share (100%)			$555,955	
-Projection April 1—June 30, 1976			211,656	
-Total CHCS				$767,611
Services to Adults				
-actual to 3-31, counties & non-salary city	$509,910			
-Balto. City salaries	191,995			
-Fringe benefits	91,445			
		$792,950		
-CHC share (40%)			$317,180	
-Projection April 1—June 30, 1976			155,418	
-Total				$472,598

In summary, Table 27 shows the projected FY 1976 expenditures for the Community Home Care Services Program: $767,611 for CHCS and $472,598 for Services to Adults. The combined total for the entire CHCS program

is $1.052,387.[6] The final column of Table 27 shows the percentages of expenditures to budgets: 93.5% for CHCS and only 43.5% for Services to Adults, yielding a combined average of 55.2%. The very low percentage for Services to Adults remains unexplained.

For Services to Adults the method of estimating expenditures for the "aged" portions (a flat 40% rate) is based on an approximation of the proportion of adult services clients who were aged in 1975. This proportion apparently was not valid for FY 1976. The fact remains that under the current accounting system there is no way of accurately projecting the expenditures for services to the elderly in this component of the program. To attempt to do so - as was done in this report - is to tread on thin ice indeed.

Employee Positions for the CHCS Program

The picture with reference to worker positions among these component elements of the program is only slightly less complicated. Table 30 gives the breakdown of positions among the program components.

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[6]This figure does not include that portion of Homemaker Services which is applied to the aged, since this program is not officially regarded as part of the Community Home Care Services Program. However, as the Baltimore City accounting system shows, this distinction is not always remembered in the local department of social services. From the point of view of the Office on Aging, although Homemaker Services Program is not officially part of CHCS, that portion of the program serving the elderly does fall within the Office's sphere of concern because it is fiscally accountable for all its pass-through funds, part of which is applied to Homemaker Services, and because all matters relative to the elderly, without regard to program, are of concern to the Office.

Table 30: Appropriated and actual employee positions for CHCS, FY 1976

Program	Appropriation	Actual
CHCS		
-supervisors	2	2
-social workers	17	17
-aides	62	47.5
-clerical workers	5	1
sub-total	86*	67.5
Services to Adults		
-Aged	75	75**
Total	161	142.5

*88 positions were requested. Two of these were eliminated prior to the beginning of the fiscal year as part of the State's Management Improvement Plan (MIP).

**The best available information, in conjunction with an educated guess based on the requirements of the MIP limiting service positions to a 90% fill level, seems to indicate that the equivalent of 75 positions in Services to Adults are filled. Apparently the 10% MIP cutback was applied entirely to the CHC program, but this conclusion is not absolutely certain. The hard information was simply not available to make a certain judgment.

A total of 86 positions is listed as being appropriated for CHCS, two fewer than the original allowance. This discrepancy is explained by the State's cost saving MIP. Among these 86 positions, it is certain that 47.5 of the 62 aide positions are filled, and all but certain that all 17 social worker positions are filled. The lack of absolute certainty is attributable to the reporting from the local departments which aggregated CHCS social workers together with social workers in the Services to Adults program. Since 96.6 workers from these combined programs were reported out of 92 allocated positions, it was assumed that all 17 CHCS social worker positions are filled. However, this assumption is not necessarily correct; it can be verified only by a time consuming process of checking back with each local department (a luxury which is not allowed by the time

constraints placed on this study). Therefore, in order to calculate cost per hour of CHC service, 64.5 direct service workers were assumed.

Cost Per Hour of Service

In calculating the cost per hour of service, DHR's average of 1558 working hours per direct service worker per year was used as a base. This is an average figure which takes into consideration average utilization of annual leave, personal leave, sick leave and paid holidays among state employees. Hence 1558 hours x 64.5 direct service workers yields 100,491 direct service worker person—hours of work per year in CHCS. This figure divided into $767,611 (total anticipated expenditures for CHCS) yields $7.64 per direct service worker hour.

It is estimated that about 85% of aides' time is spent in providing services to clients and 65% of social workers' time is so spent. The weighted average (with a ratio of 3 aides to 1 social worker) for social workers and aides combined is 80% of working time spent in providing services to clients. Therefore, multiplying $7.64 by a factor of 1.2 (to adjust for time not spent in providing services) produces a direct cost per hour of service of $9.17. To this cost the overhead costs must be added.

DHR's Division of Budget and Finance estimates that all State social service programs incur a 35% overhead cost.[7] Thus $9.17 x 1.35 yields

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[7]Overhead costs include general administration of local departments, costs of local governments for services provided to local departments, State Administration (including Program Specialist and Executive Staff), DHR's Central Administration (including Office of the Secretary, Office of Administration, Office of Program Planning and Evaluation, and Office of Coordination), and indirect costs of State Government (as allocated to DHR by the Statewide Cost Allocation Plan). This information is documented in a letter from Charles P. Plantholt, Chief of Budget and Fiscal Planning Group of DHR's Division of Budget and Finance, to Joseph P. Mulcahy, Chief of Program Development and Analysis Section of USDA's Food Stamp Program, January 8, 1976.

$12.38 as the cost per hour of CHC service, including overhead costs.

This information is presented in schematic form below:

Table 31: Summary of direct and overhead unit costs of CHCS for FY 1976

Working hours per person per year	1558 hours
Direct service workers for CHCS	64.5 hours
CHCS direct service worker hours per year	100.491 hours
Total projected CHCS expenditures	$767,611
Direct cost per direct service worker hour	7.64 per hour
Direct cost per hour of service provided (@ 80% of working hours)	9.17 per hour
Cost per hour of service including overhead (@35% of direct costs)	$12.38 per hour

An obvious question which arises: How does the CHCS cost per hour of service compare to the unit cost of similar services provided by other agencies? At this time comparable analyses of other agency costs are not available. The crucial issue is the efficiency with which community based social services can be provided to the disabled elderly.

Cost Analysis: Conclusion

Theoretically, any accounting system, financial or social, is intended to support and enhance informed program management, including control, planning, evaluation and decision-making functions. The foregoing sections of this cost analysis have documented in some, though by no means complete, detail the principal researcher's difficulties in obtaining clear, accurate and complete fiscal and personnel data for the CHCS program. In effect if not by intent, the accounting system currently in use for the two components of the Community Home Care

Services program (as well as for the Homemaker Services program) impedes effective management. The exact number of workers providing services to the aged is not known. The portion of expenditures within the Services to Adults program attributable to the aged is not known. Baltimore City is charging salaries of CHCS workers to the Homemaker program, thus artificially inflating Homemaker expenditures and reducing CHCS expenditures. Baltimore City has not yet been integrated into the Computerized accounting system. In some local departments of social services the distinction is apparently not made between CHCS workers (strictly defined) and Services to Adults workers providing services to the aged. In short, confusion about CHCS and about all community based services to the aged abounds; the accounting system for these programs can only be regarded as much less than adequate.

Proposing specific recommendations for the improvement of DHR's accounting system for services to the aged certainly lies beyond the scope of this study. However, that revision of the fiscal accounting system is urgently needed should be obvious by now, if it was not before. Remedying the problems identified in this report would constitute a major step in the direction of the needed improvements.

VI

LIMITATIONS AND FURTHER RESEARCH

Beside the inherent limitations of a case record survey methodology, in contrast to an experimental or quasi-experimental design, this study has been subject to a number of other significant limitations. Because the time and resources available to conduct the study were severely limited, only data which were readily retrievable from fiscal and case records, from program personnel's knowledge of clients and of the operation of the program, were collected. This approach, while it brings together more information about the program than has heretofore been assembled, does leave important gaps in information which render the evaluation less than complete and definitive. Among the important gaps are information regarding client's own perceptions and judgements about the program, which would have been gathered through client interviews; information about persons who may have applied to the program but were not accepted - their characteristics and needs and reasons for non-acceptance; information about people who may have voluntarily dropped out of the program or been terminated - and why. In short, this study reveals nothing about that considerable portion of the target population which is not actually participating in the CHCS program. This constitutes a major limitation. Also omitted from the study is any consideration of the probably as yet unspecified criteria for determining when it is in the client's best interests to receive institutional care rather than community based services, that is, when it is no longer beneficial to the client to remain in the community.

Some important omissions emerged from a review of the completed surveys. As previously noted, "heart condition" was inexcusably overlooked in the question on medically defined conditions, and this condition is a

leading medical problem among the elderly. So unfortunately the prevalence of this condition among the client population is not revealed in the data. Similarly, in the question on functioning status no distinction was made between clients who can perform a function without any help and those who require the support of a mechanical device, such as a cane or walker, but not another person's help. This omission tended to obscure certain functional disabilities and to keep the functional status score artificially lower than it would otherwise have been.

Other limitations are revealed by the questions which were posed in the section on the pattern of service provision regarding the sufficiency of three and a half hours of service per week and the possible utilization of other resources together with CHC services.

In addition, the following limitations are also acknowledged:

a. There was no field test of the questionnaire in its present form to assure clarity and uniform understanding of what was requested, although the majority of questions were adopted from other previously used instruments;

b. Client risk factors indicated by the number of medically defined conditions, the number of personal/social conditions, and the functioning status of the individual were used to measure the degree to which clients are at risk of institutionalization. Other criteria, such as severity of a risk factor or the relationship between particular types of timed intervention and the prevention of institutionalization, could have been useful in a study of this sort.

c. Data regarding the degree of risk of institutionalization were subject to error since they did not provide for weighing the severity of each medical problem, and since functional status indicators did not identify a need for wheelchairs, walkers or other mechanical devices.

The enumeration of these limitations should be sufficient to indicate the utility and benefit of further study. This evaluation has succeeded in achieving a largely descriptive analysis of the programs conducted including an orderly description of the pattern of client needs and provision of service, some tentative conclusions regarding the effectiveness of the program in preventing institutionalization, and an analysis of the costs of providing Community Home Care Services to the aged. What remains to be done is to test the validity and reliability of these preliminary findings and to fill the gaps left by this study through the application of a more rigorous research methodology (perhaps an experimental, longitudinal study). Any further research should build on the foundations of this study to enhance comparability of data, but should certainly include clients themselves as a major input into the study.

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APPENDIX A

MARVIN MANDEL
GOVERNOR

MARYLAND STATE OFFICE ON AGING AND DEPARTMENT OF HUMAN RESOURCES
Community Home Care
EVALUATION INSTRUMENT

01 _____ Client's Identification Number

02 Project Code(s)

02.1 _____ 02.2 _____ 02.3 _____

03 _____ Location (County or Baltimore City) of Service

04 _____ Date (month - year) accepted for service

05 Client referred to CHC by: ___1) Family ___4) Hospital/Social Worker
___2) Friend ___5) Other Agency (Specify: _____)
___3) Physician

I. SOCIO-DEMOGRAPHIC DATA

06 Age at last birthday: _____ years

07 Sex: _____ Male _____ Female

08 Race: _____ White _____ Black _____ Other (Specify: _____)

09 Marital Status: ___1) Single ___3) Divorced
___2) Married ___4) Separated ___5) Widowed

10 If client's spouse is living, does he/she receive service in the CHC Program? _____ Yes _____ No _____ Don't know

11 Living Arrangements

11.1 Client Currently resides in (Check one):

___1) Own home
___2) Another's home
___3) Foster home
___4) Rented commercial rooms/apartment
___5) Licensed Health/nursing/domiciliary care facility
___6) Room and board home
___7) Legally unlicensed domiciliary home
___8) Illegally unlicensed domiciliary home

11.2 Client currently lives (Check one):

___1)Alone

___2)With spouse only

___3)With spouse & adult child(ren)

___4)With spouse & other relative(s)

___5)With spouse & non-relative(s)

___6)With adult child(ren) only

___7)With other relative(s) only

___8)With non-relative(s) only

12 Income Status

Client is currently receiving income from (Check all that apply):

_____ Employment

_____ SSI

_____ Social Security

_____ Other pension (specify:_____)

_____ No income

_____ Fee paying client

II. CLIENT RISK FACTORS

13 Medically defined conditions (Check all that apply)

_____ Alcoholism(1)

_____ Arthritis (2)

_____ Cancer (3)

_____ Chronic Lung Disease (4)

_____ Diabetes (5)

_____ Hypertension(6)

_____ Mental disorders (7)

_____ Post-operative condition (8)

_____ Stroke (9)

_____ Tuberculosis (10)

_____ Other (specify:_____)(11)

14 Functioning Status (Check one in each item)

14.1 The client is able to move around the house -

___(0)without help of any kind (12)

___(1)with help of another person (13)

___(2)does not move around house (14)

14.2 The client is able to walk up and down stairs -

___(0)without help of any kind (15)

___(1)with help of another person (16)

___(2)does not go up and down flight of stairs (17)

14.3 The client is able to leave the house and go outside -

___(0)without help of any kind (18)

___(1)with help of another person (19)

___(2)client is confined to house (20)

14.4 The client is able to prepare own meals -

___(0)without help of any kind (21)

___(1)with help of another person (22)

___(2)does not prepare meals (23)

14.5 Client is able to take a bath or shower -

___(0)without help of any kind (24)

___(1)with help of another person (25)

___(2)client is bathed (26)

14.6 Client is able to get completely dressed -

___(0)without help of any kind (27)

___(1)with help of another person (28)

___(2)client is dressed by another person (29)

14.7 Client is able to perform toilet functions and personal grooming -

___(0)without help of any kind (30)

___(1)with help of another person (31)

___(2)client does not use toilet room and/or is groomed by another (32)

14.8 Client is able to see -

___(0)with no impairment (33)

___(0)with impairment compensated by glasses (34)

___(1)with impairment not compensated by glasses (35)

___(2)client is legally blind (36)

14.9 Client is able to hear -

___(0) with no impairment (37)

___(0) with impairment compensated by hearing aid (38)

___(1) with impairment not compensated by hearing aid (39)

___(2) client does not hear (40)

15 Personal/Social conditions at the time of initiation of service (Check all that apply):

_____ undiagnosed and/or untreated physical health problems (41)

_____ undiagnosed and/or untreated mental health problems (42)

_____ unnecessary or inappropriate institutionalization (43)

_____ potential or actual malnutrition (44)

_____ potential or actual abuse, neglect or exploitation (45)

_____ marital or family problems (46)

_____ isolation or loss of social contact (47)

_____ inadequate home or family management (48)

_____ inadequate housing or hazardous living conditions (49)

_____ lack of educational, recreational or cultural opportunities (50)

_____ lack of information about available community services (51)

_____ lack of transportation (52)

_____ other (specify:_____) (53)

16 Most recent prior institutionalization within the last three years:

16.1 Has the client been in a hospital, nursing home, intermediate or personal care or other institution within the last three years? _____Yes _____No

(Answer questions 16.2 - 16.4 only if answer to 16.1 was "Yes")

16.2 Kind of institution -

___1) Acute care hospital

___2) Chronic care hospital

___3) Mental Hospital

___4) Nursing home

___5) Domiciliary care home

___6) Other (Specify:_____)

16.3 Length of client's most recent stay in institution

____1) 0 - 6 months

____2) 6 months - 2 years

____3) over two years

16.4 The cause(s) of client's most recent institutionalization was/were:

____ Acute medical condition(s) (Specify: _____)

____ Chronic medical condition(s) (Specify: _____)

____ Mental Illness

____ Lack of supportive services in community

____ Other (Specify: _____)

III. SERVICES CURRENTLY PROVIDED BY CHC STAFF

17 Types of services (Check all that apply)

17.1 Housekeeping/Chore Services	Provided by: S W (1)	CHC-AIDE (2)	SERV-AIDE (3)	HMK (4)
____Light housecleaning (1)	____	____	____	____
____Preparation of Food (2)	____	____	____	____
____Preparation of Special Diets (3)	____	____	____	____
____Minor repairs (4)	____	____	____	____
____Mending/Sewing (5)	____	____	____	____
____Laundry/ironing (6)	____	____	____	____
____Other: _____ (7)	____	____	____	____
17.2 Home Management				
____Budgeting (8)	____	____	____	____
____Banking/payment of bills (9)	____	____	____	____
____Meal planning (10)	____	____	____	____
____Shopping (11)	____	____	____	____
____Utilization of Food Stamps (12)	____	____	____	____
____Other: _____ (13)	____	____	____	____

Provided by:

		S W (1)	CHC-AIDE (2)	SERV-AIDE (3)	HMK (4)
17.3	Health Related				
	____Arrangements to obtain health care (14)	____	____	____	____
	____Assistance in following treatment (15)	____	____	____	____
	____Personal care (16)	____	____	____	____
	____Telephone/telecare (17)	____	____	____	____
	____Other:_____ (18)	____	____	____	____
17.4	____Counseling services to enable client to remain in own home (19)	____	____	____	____
17.5	Protective Services				
	____Counseling to client and/or relatives, guardian, etc. (20)	____	____	____	____
	____Securing legal services (21)	____	____	____	____
	____Other:_____ (22)	____	____	____	____
17.6	____Assistance in obtaining appropriate alternate living arrangements in community or institutional facility (23)	____	____	____	____
17.7	____Foster Care (24)	____	____	____	____
17.8	Transportation/escort to				
	____Medical/dental facilities (25)	____	____	____	____
	____Shopping facilities (26)	____	____	____	____
	____Recreational facilities (27)	____	____	____	____
	____Other:_____ (28)	____	____	____	____
17.9	Referral(s) by CHC staff to other community services				
	____Home delivered meals (29)	____	____	____	____
	____Congregate meals (30)	____	____	____	____
	____Day care (31)	____	____	____	____
	____Geriatric Evaluation Service (32)	____	____	____	____
	____Medical Care (33)	____	____	____	____
	____Nursing services (34)	____	____	____	____
	____Other:_____ (35)	____	____	____	____
17.10	____Institutional services (36)	____	____	____	____

18 Frequency of Services

18.1 _____Number of days per week client receives service (average)

18.2 _____Number of hours per week client receives service (average)

19 Projected need for continuing service to client

19.1 Duration of service

_____0-6 months

_____6 months - 2 years

_____2 years or longer

19.2 Intensity of service

___1)at less intensity

___2)at same intensity

___3)at greater intensity

20 How did client "manage" before receiving CHC services? (check all that apply)

_____Client did not have CHC service needs

_____Client was institutionalized

_____Client's needs remained essentially unmet

_____Spouse

_____Adult child(ren)

_____Other relative(s)

_____Unpaid non-relative(s)

_____Paid non-relative(s)

_____Homemaker Service

_____Other: _____

21 Are resources identified in (20) above still available?

_____ Yes _____ No

22 What does the client personally express as his/her most pressing service need(s)?

(Name the service(s) and supply the corresponding code number(s) from 17 in the spaces provided. List no more than three.)

	Service Need	Code #
22.1	_____	_____
22.2	_____	_____
22.3	_____	_____

IV. WORKER'S ASSESSMENT OF CLIENT NEED AND SERVICE EFFECTIVENESS

23 From the risk factors identified in 13, 14, and 15 above, which do you regard as most important in determining the service plan for the client? (Name the impairment(s) and/or condition(s) and supply the corresponding code number(s) from 13, 14, or 15 in the spaces provided.)

	Risk Factors	Code #
23.1	_____	_____
23.2	_____	_____
23.3	_____	_____

24 Given the risk factors identified in 13, 14, and 15 above, what in your judgement is/are the client's most pressing service need(s) irrespective of the constraints and limitations of CHC and related services? (Name the service(s) and supply the corresponding code number(s) from 17 in the spaces provided. If the needed services are not found in 17 and therefore do not have a code number assigned, enter the number 99 in the appropriate space.)

	Service	Code #
24.1	_____	_____
24.2	_____	_____
24.3	_____	_____

25 To what degree are these needs currently being met by the services provided through CHC?

_____ Completely _____ Partially _____ Minimally _____ Not at all

26 To what degree are the services being provided through CHC appropriate or relevant to the client's needs?

_____Completely _____Partially _____ Minimally _____ Not at all

27 In the absence of the CHC program, would other resources be readily available or accessible to prevent the client's institutionalization

_____Yes _____ No

28 If yes, which of the following resources could be utilized by the client to prevent institutionalization? (Check all that apply)

_____own financial resources

_____other household resources (including living with family, friends, etc.)

_____resources from private or voluntary agencies, organizations, etc.

_____community resources from municipal, county or state government

29 In your opinion, are the CHC services currently provided to the client effectively preventing the client's institutionalization?

_____definitely yes _____probably no

_____probably yes _____definitely no

Thank you for your time and cooperation
in filling out this form.

APPENDIX B

DEPARTMENT OF HUMAN RESOURCES

1100 NORTH EUTAW STREET
BALTIMORE, MARYLAND 21201

STATE OF MARYLAND
MARVIN MANDEL
Governor

RICHARD A. BATTERTON
Secretary

WILLIAM G. SYKES
Deputy Secretary

RECEIVED
APR 20
OFFICE ON AGING

April 28, 1976

cc Jackson
Donna
Dr. Trybuch
F41

Mr. George Burnett
Assistant Director
Office on Aging
301 W. Preston Street
Baltimore, Maryland 21201

Dear George:

Your letter of February 10 did not specify whether you were inquiring about budget data for Fiscal Year 1976 or 1977, so I will provide you with figures for both years.

The Community Home Care Program is provided to persons in two ways, services purchased by the Social Services Administration and direct services provided by local department of social services.

The respective appropriations for purchased community home care services for each fiscal year are the same $525,573 funded as follows:

Federal - Title XX	$ 374,470	71.25%
General - Matching for Title XX	124,823	23.75%
General - For Ineligibles	26,280	5.0 %
Total	$ 525,573	100%

The appropriation assumes that 95% of the clients served are eligible for Title XX funding and 5% are not. For those clients Title XX eligible, costs are claimed for 75% Title XX and 25% General.

The appropriations for the local social services departments are divided amongst three (3) services functions, two (2) of which have a portion of the budget allocated to the community home care services for the aged. These two (2) are Homemaker Services and Social Services to Adults. The third project is the direct community home care (Chore) services unit. In each instance, it was estimated that 5% of the efforts would be provided to aged persons not eligible for Title XX (through September 30, 1975 Title VI).

Homemaker Services

Estimated that approximately 40% of the effort will be provided to aged persons.

	FY 1976	FY 1977
Federal - Title XX (VI)	$ 669,078	$ 807,390
General - Matching	223,026	269,130
General - Ineligibles	46,953	56,659
Total	$ 939,057	$ 1,133,179

Adult Services

	FY 1976	FY 1977
Federal - Title XX (VI)	$ 773,505	Transferred to and included with CHC services
General - Matching	257,835	
General - Ineligibles	54,281	
Total	$ 1,085,621	--

Community Home Care Services

	FY 1976	FY 1977
Federal - Title XX (VI)	$ 959,729	$ 1,385,445
General - Matching	319,910	461,815
General - Ineligibles	67,349	175,287
Total	$ 1,346,988	$ 2,022,547

NOTES:

The amount of the totals is, in some instances, understated in relation to the budget due to the fringe benefit cost, which is incurred by the Department of Personnel and DHR only reimburses that Agency for any Federal attainment.

Total for Fiscal Year 1976 are further understated due to the General pay raise added to the appropriation after July 1, 1975. The General fund requirement was received direct from the Department of Personnel via budget amendment.

For Fiscal Year 1977, it is the General Fund amounts identified that DHR will be requesting for amendment to the Social Services Administration budget.

Should you have any questions, or if this is not what you were looking for in the way of a response, do not hesitate to contact me.

Sincerely,

Charlie

Charles P. Plantholt
Chief
Budget and Fiscal Planning Group

CPP:dr

cc: Howard R. Albert/John O. Elliott
Dr. Richard Bateman

APPENDIX C

ADDENDA
To The
Evaluation Report of The
Community Home Care Services Program

This addenda is provided as a supplement to the FY 1976 Evaluation Report of the Community Home Care Services Program - a descriptive study of services provided to elderly persons by local departments of social services.

The following briefly describes the methodology used in delivering services, the policy and guidelines established by the State Department of Social Services Administration, staffing patterns, coordination between the various service units within local departments and with other community agencies and organizations.

SERVICE DEFINITION

Community Home Care Services are coordinated social and health related services which make available a comprehensive range of services needed by elderly persons 65 years and older and their spouses, regardless of age, to enable them to remain in their own homes or in other independent living arrangements, consistent with their desires, abilities and safety; or to assist them to attain appropriate alternate living arrangements as needed. The various types of assistance provided serve as effective alternatives to inappropriate institutional care and are made available to elderly persons, regardless of income.

COMPONENTS OF SERVICE

A. The service provided by social workers are as follows:

1. Assessment, planning, case management and counselling services.

   Study of social and medical conditions and the development of a plan of care to meet each person's needs appropriately, utilizing other professional and supportive services available in the local department and in the community; the provision of on-going counselling, as needed to enable elderly persons to remain in their own homes or to obtain appropriate alternate living arrangements.

2. Protective Service.

   Investigation of reports of abuse and neglect; identifying and providing local department services and referrals to other community agencies for those who are at risk of maltreatment, injury, inadequate food, clothing, shelter and insufficient health care, and/or who need protection from exploitation.

3. Foster Care Services.

   The provision of supervised private family homes for persons who are not capable of complete independence, and whose families cannot help them, but who do not require nursing home care.

4. Institutional Services.

Assistance to persons who have been placed in nursing homes or institutions who no longer require institutionalization when the goal is their return to community based living; the provision of services to reestablish them in the community, according to their desires and needs.

B. The services provided by CHCS Aides and are made avilable by referral for Homemaker Service include but are not limited to the following:

1. Light housekeeping services, including laundry, planning menus, shopping, preparation of meals and special diets.

2. Chore services and minor repairs.

3. Transportation and escort services to medical and other community facilities.

4. Assistance with budgeting, management of money, use of food stamps and paying bills.

5. Telephone - telecare reassurance, writing letters and reading to clients.

6. Assistance with personal hygiene and dressing.

7. Personal care services, under medical direction and nursing supervision, as needed by homebound chronically or acutely ill or disabled patients, according to procedural agreements between the Departments of Social Services and the local departments of Health or a Visiting Nurse Association. (i.e., bed baths, transferring patients from bed to wheel chairs; helping with prescribed exercises as taught by professional health personnel; assisting with ambulation). An evaluation by a public health nurse is required prior to the provision of personal care services.

SERVICE PROCESS

A. Intake

In response to requests for service and referrals, social workers visit the applicant in need of service to access social and health related conditions and to plan with the applicant for his care. When there is an indication that personal care service will be needed, requests are made for medical and nursing evaluations.

A service plan is developed which will meet one or more of the following goals:

1. To make available all needed local department services and other public and voluntary community services to enable the client to remain in his own home, preventing inappropriate institutionalization.

2. To assist chronically ill and disabled persons achieve maximum physical and mental functioning in their own homes, safe-guarding their well-being to achieve or maintain self-sufficiency, independence and self determination.

3. To provide the services necessary to prevent and remedy neglect, abuse and exploitation of persons who are unable to protect themselves.

4. To provide the services necessary to assist persons to obtain appropriate living arrangements with relatives, in foster care homes, or in boarding or domicilary homes; to assist them in their return to community based living after institutionalization; and to obtain nursing home care when needed.

B. Continuing Services

As needed, social workers provide on-going counselling to resolve problems. They consistently carry case mangement responsibilities to safe-guard the welfare of elderly persons being served. CHCS Aides assist the social workers and, within staff limitations and to the extent possible, provide in-home services. Additionally, because of the great need for in-home services, referrals are made for Homemaker Services. /1

Social workers carry responsibility for assisting the clients in their utilization of other community services, the objective being to make available to the clients all services needed or desired such as medical and nursing services, legal services, meals-on-wheels, day care, foster care services, transportation, congregate meals, senior citizens activities, etc., with case management follow-up.

C. Termination

Termination of service occurs when a person no longer needs service following a crisis or short term disability; when the client moves out of the local department's geographic area or becomes deceased; when institutional care is required and service is no longer needed; or when other conditions change, negating the need or appropriateness of service.

COMMUNITY HOME CARE STAFFING PATTERN

During Fiscal Year 1976, allocations of positions to local departments of social services for Community Home Care Services were as follows:

CHCS Aides	-	62
Social Workers	-	17
Supervisors	-	2
Clerical Workers	-	5
	TOTAL	86

/1 More than 50% of the Homemaker Service caseload per month, Statewide, are persons who are 65 years and older. Because there are 270 Homemakers in the State compared to 62 CHCS Aides, most of the in-home care of the severely ill homebound elderly persons and much of the assistance to other persons served to prevent institutionalization are provided by Homemaker Service units.

Prior to the initiation of the Community Home Care Services Program, (first allocations in FY 1975) all services to the elderly, disabled and blind were provided by "Adult Service" social workers. During FY 1976, with the exception of the seventeen (17) new social worker positions listed above, services to elderly persons continued to be provided by Adult Service Units in local departments. However, for budgeting and planning purposes at the state level, the equivalency of 75 adult service staff (social workers, supervisors and clerks) were considered part of the Community Home Care Service Program.

By law, all personnel working in local departments of social services must be in State Classified positions. All supervisors in the program have Masters Degrees, including a certain percent of the 75 adult service staff budgeted for Community Home care Services. All social workers have attained at least a Bachelor's Degree, some in Social Work; a few have Masters Degrees. The para-professionals have less education. Most of them, however, have earned a high school diploma or an equivalency through GED, and many have earned some college credits.

WORKLOAD STANDARDS

For budgeting and program planning purposes, monthly caseloads for CHCS social workers are fifty (50) cases each. In reality, they run as high as ninety (90) cases at times for some workers when a local department is under staffed. (e.g. the governor's freeze during FY 1976). A CHCS Aide may assist a social worker with her caseload appropriately, or she may be assigned to meet the need for a great deal of transportation (if this service is not available from any other agency in the community); or the aide may be used for in-home care services.

When in-home care services are provided by Aides, caseloads per month vary between eight (8) and twenty (20) cases each, dependent upon the amount of time they are assigned and the tasks required of them. (The higher caseloads are possible when aides are assigned to clients living in public housing).

In most instances, the supervisors are responsible for supervising not only social workers but CHCS Aides and SERVE Aides. In very small agencies, they also supervise homemakers.

The ratio of supervisor to supervisee (social worker) is budgeted at 1:6. In actually, most ratios range from 1 to 8 (1:8) to 1 to 10 (1:10) to include the para-professionals.

Both individual and group supervision are provided with periodic in-service training sessions scheduled by the supervisors.

TRAINING OF CHCS STAFF

The State Department (DHR/SSA) carries responsibility for initial training programs for the CHCS staff and for continuing in-service training. Between 60 to 90 hours of initial training for CHCS have been provided to staff in each of the various regions of the state. (Exceptions: Montgomery DSS and Baltimore City DSS which provide their own training.

To implement aide services for ill and disabled elderly persons who need personal care services, DHR/SSA standards established for Homemaker Services in Maryland are followed which require that all para-professionals complete the American Red Cross Home Nursing Course in addition to the other required training provided by DHR/SSA.

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APPENDIX D

EXAMINING THE COSTS OF OTHER AGENCIES

How can efficiency be measured? As stated, exact comparable analyses of costs of other agencies are not available. All agencies keep their financial records differently, and no two agencies provide exactly the same services. However, it is useful in this report to show how a cost analysis of another agency can be done. Certainly the one agency used here does not represent all or any other agencies, but the listing of services and costs can indicate how more detailed cost analyses could be done based on similar information about other agencies. No attempt is made to interpret data or to compare services with those provided by CHCS.

Cost Analysis: Homemaker Health Aide Service of the National Capital Area, Inc.

Service Definition

The agency provides homemaker health aide service to families with children, aged, ill and disabled adults to enable them to remain in or return to their own homes and, to the extent possible, to increase their capacity for self-care and independence. The service is provided by trained and professionally supervised homemakers. Implementation of an individualized plan of care follows an assessment of need and establishment of mutually determined goals.

A. HOMEMAKER HEALTH AIDE SERVICES PERFORMED

Depending upon the needs and goals, the services provided by Homemakers may include:

1. Caring for children of all ages
2. Marketing, planning, and preparing meals and special diets
3. Assisting the family to plan expenditures and manage funds
4. Keeping the household in order
5. Rearranging work areas for disabled persons
6. Assisting with care of elderly persons
7. Teaching parents and older children effective methods of child care and household management
8. Giving personal care to a sick or disabled person under the direction of the attending physician or public health nurse
9. Instructing and encouraging techniques of self-care for blind and disabled adults
10. Accompanying on outings, to clinics, doctor appointments, etc.

B. AGENCY STAFFING PATTERN

1. Professional - 16 positions

1 Executive Director
1 Assistant Director (responsible for 4 Homemaker Supervisors)
1 Intake Supervisor
1 Intake Worker
1 Supervisor of Service (responsible for 5 Homemaker Supervisors)
1 Home Economist/Coordinator of Recruitment and Training
1 Public Health Nurse (60% time)
9 Homemaker Supervisors (1 60% time)

Of the 16 professional people, 12 have master's degrees in social work or a closely allied profession and 4 have baccalaureate degrees and a minimum of 3 years' experience in a social agency.

Each Homemaker Supervisor is responsible for 14-18 Homemakers and the cases to which they are assigned, case assessment, review and implementation of a plan of care, working with other agencies who are or may become involved in a case, and for continuous supervision of the delivery of service in relation to case needs. Both Homemaker Supervisors and Homemakers are assigned to specific geographical areas with responsibility for development and delivery of service, knowledge of resources available, attending meetings and representing the agency at appropriate functions in the assigned areas. The agency has a "pairing" system with adjacent areas to assure back-up during absences and an interchange of Homemakers in peak periods.

Homemaker Supervisors have support assistance from 4 career ladder Homemakers called Field Counselors. They help with scheduling, give direct assistance to new or problematic Homemakers in homemaking or planning tasks, obtain food stamps, make select home visits, cover cases in emergencies, etc.

The Public Health Nurse serves primarily in consultative and teaching capacities and does not provide skilled nursing service to clients. When skilled nursing is needed or the Homemakers is required to perform personal care tasks which are an essential part of a medical or nursing care plan, that care (home health aide service) must be delegated, instructed and supervised by a nurse, the attending physician or other health professional, i.e., physical therapist.

The Home Economist serves as Coordinator of Recruitment and Training, teaches those sections of the entry training appropriate to her field, provides consultation to Supervisors, Homemakers and clients on such things as special diets, time and work management, menu and budget planning, etc.

2. Clerical - 11 positions

Finance Officer, Bookkeeper, Fiscal Clerk, Intake Clerk, PBX Operator/Receptionist, Administrative Officer and three secretaries (includes one in Prince George's County office shared with VNA).

3. Homemakers - 180 including full- and part-time

Homemakes are both salaried and hourly employees but all are on the same wage scale with pro-rated benefits for all including annual leave (10-15 days a year), sick leave (15 days a year), 9 paid holidays, and pay for time between assignments. There are classifications and job descriptions for Homemaker Health Aide I, II, III, and Field Counselor. Wage scales range from $2.84 to $4.02 per hour. Group Hospitalization/Medical Insurance (contributory) and Retirement Plan (contributory) are provided for those who work 30 hours or more a week. (Eligibility for these benefits will be changed for compliance with ERISA.)

C. SERVICE COMPONENTS

1. Assessment of Need - The initial assessment and plan of care is developed at Intake. Intake secures sufficient information from the client and/or referring source and collateral sources to determine if service should be initiated and the kind of service needed; develops an initial plan of service (goals, duties, hours and estimated duration); plans for or confirms nursing supervision for the homemaker when personal care is needed as part of a medical or nursing care plan. If a case is accepted a Homemaker is assigned with the Homemaker Supervisor completing the initial assessment process during the first week of service. Reassessment of need and progress toward established goals is a continuing process carried out by the Homemaker Supervisor through home visits, reports and observations of the Homemaker, contacts and conferences with other agencies and medical resources. Service plans are reviewed and modified as needed throughout the period of service.

Referrals for other community resources may be made at intake to complete a case plan or for more appropriate service.

2. Supervision of Homemakers - All Homemakers are assigned to a Homemaker Supervisor with each responsible for 14-18 Homemakers. Homemaker Supervisors are responsible for helping Homemakers understand the problems and goals in the case, scheduling

assignments and detailing a plan of service (hours and tasks), receiving observations, providing support and interpretation, implementing service and personnel policies and procedures, evaluating work performance, arranging for assistance from other disciplines as indicated, i.e., home economist, public health nurse, etc., for purposes of increased competence and development on the job; providing individual and group opportunities for discussion of case problems and on-going training sessions.

3. Case Management - Case management in the context of homemaker service as provided by this agency includes establishment and implementation of a plan of care, referral to and working with other agencies who are or may become involved in a case (community nursing services, Telephone Reassurance, Meals-on-Wheels, Food Stamps, offices, clinics, day care programs, counselling or casework services, transportation services, etc.), supporting the service plans and goals of other agencies with both the client and homemaker. As a minimum, the social services provided as an integral part of the professional component include:

    - Referral to appropriate agencies.
    - Counselling with client about utilization of the service, need for and use of other types of assistance.
    - Protective service.

4. Screening and Training of Homemakers

    - The agency has a formalized screening process which includes group interest meetings and individual interviews. At least two references are required as is a preemployment physical examination arranged and paid for by the agency.

      Annual physicals are provided thereafter. All applicants are provided a copy of the written job description and the classification and salary scales. At the time of appointment, they are formally notified and provided with the Manual of Personnel Policies.

    - The entry training program of the agency consists of 60-70 hours which must be completed before assignment to any case. (National standards require a minimum of 40 hours.) Homemaker trainees are paid their regular wages during this period. Instruction is provided by the agency's professional staff and is supplemented by personnel, paid or volunteer, from other agencies or disciplines. The curriculum incorporates

a combination of lectures, discussion groups, workshops and practical demonstration of skills in areas which include:

- The Homemaker, the agency and the Community; development of the service locally, nationally and internationally; purpose, goals and philosophy of the Agency;

- Working with troubled people, basic human needs, growth and development of children, needs and problems of older adults; mental health and mental illness, and implications of illness;

- Personal care and rehabilitation with particular reference to the care of helpless and semi-helpless persons, body mechanics and prenatal care;

- Home management including home economics, nutrition, laundry, and care of clothing and household items. items.

Competence is further developed by regularly scheduled in-service training sessions and by supervised work experience, particularly during the six-month to one-year probationary period of the employee.

D. EXPENSES

1. Expenses (less special project costs)

Program service	$1,301,317

(50% Executive Director, 75% Assistant Director, all Homemaker salaries, and proportionate percentage of benefits and taxes; medical exams and training consultants; 100% uniforms and training supplies, travel, 75% office supplies; 75% telephone, occupancy, equipment rentals and maintenance, and multi-cover insurance; bonding, liability, property, etc.)

Management and General	$ 156,822

(50% Executive Director, 25% Assistant Director, all clerical salaries, and proportionate percentage of benefits and taxes; professional fees for legal audit and computer services; 25% office supplies, telephone, occupancy, equipment rentals and maintenance, and multi-cover insurance; 100% office housekeeping supplies, postage, printing and publications, conferences and meetings, recruitment, board and miscellaneous expense, dues to National Council for Homemaker-Home Health Aide Service.

$1,458,139

E. COST OF SERVICE FROM FY OPERATIONAL BUDGET

Total paid hours per year	301,047
Total direct service hours per year (78.5% of total)	237,827
Direct cost per worker hour	$6.14

The hours that are not direct service hours are broken down in the following way:

4.8%	14550½ hours - travel
2.9%	8730½ hours - Conferences
1.2%	3612½ hours - training
12.2%	36727 3/4 hours - Holidays and Leave
.4%	1204 1/4 hours - Unassigned